REPORT RESUMES

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CAPITAL REQUIREMENTS STUDY, APRIL 1964.
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THE PURPOSES OF THIS STUDY WERE--(1) TO FORMULATE A MODEL FOR ESTIMATING FUTURE PHYSICAL REQUIREMENTS CAPABLE OF EQUITABLY DIFFERENTIATING AND SUMMARIZING THE INDIVIDUAL NEEDS OF INDIANA'S FOUR STATE-SUPPORTED INSTITUTIONS, AND (2) TO DETERMINE AN ALLOCATION FORMULA FOR DISTRIBUTION OF AVAILABLE CAPITAL APPROPRIATIONS WITH BIENNIAL PROVISIONS FOR ADJUSTMENTS DUE TO FLUCTUATIONS IN ESTIMATED ENROLLMENTS AND CURRICULAR CHANGES. THE PLAN, SIMPLY STATED, REQUIRED THAT CURRENT 1962-3 FACILITIES BE SUBTRACTED FROM 1972-73 NEEDS, AND THAT THE RESULTING ADDITIONAL SPACE FOR EACH INSTITUTION REPRESENTED ITS PROPORTIONAL SHARE OF THE TOTAL 1962-1972 REQUIREMENTS. THE STUDY IS DIVIDED INTO FOUR MAJOR COMPONENTS--(1) THE COLLECTION AND CLASSIFICATION OF DATA CONCERNING STUDENTS, STAFF AND SPACE, (2) THE JOINT DEVELOPMENT OF APPROPRIATE AND EQUITABLE SPACE FACTORS AND RATIOS, (3) THE ESTABLISHMENT OF ENROLLMENT ESTIMATES FOR THE ACADEMIC YEAR 1972-73, AND (4) THE PROCEDURAL STEPS AND CALCULATIONS COMBINING THE ABOVE ITEMS INTO A SUMMARY REPORT OF FUTURE REQUIREMENTS. PRESENTED IN THIS REPORT IS THE METHODOLOGY, THE CALCULATED REQUIREMENTS, THE COLLECTED DATA ON STUDENT ENROLLMENT, STAFF AND SPACE INVENTORY, AND MANAGEMENT REPORTS ON ROOM UTILIZATION, CLASS ORGANIZATION, CLASS HOUR DISTRIBUTION AND PURDUE UNIVERSITY'S CLASSROOM REQUIREMENTS FOR 1960-68. (BH)

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CAPITAL REQUIREMENTS STUDY

April 1964

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INTRODUCTION

The acts passed by the 86th session of the Indiana General Assembly stated in part that the "...four state universities and colleges shall cooperate in working out a formula to be presented periodically to the legislature and any other proper authorities for budgeting purposes...".* As a result of this act, the four state supported institutions of higher education--Ball State Teachers College, Indiana State College, Indiana University, and Purdue University--have, during the past 12 years, continued to improve and develop these cooperative inter-institutional management studies. This capital appropriation study is one result of these joint efforts.

The purposes of this study were: (1) to formulate a model for estimating future physical facility requirements capable of equitably differentiating and summarizing the individual needs of each of the institutions, and (2) to determine an allocation formula for distribution of available capital appropriations with biennial provisions for adjustments due to fluctuations in estimated enrollments and curricular changes. More than two years of combined talents of representatives from all four schools were required to formulate and finalize the plan that was utilized.

The plan, simply stated, required that current 1962-63 facilities be subtracted from 1972-73 needs, and that the resulting additional space for each institution represented its proportional share of the total 1962-72 requirements. However, as you begin to digest the detail data provided, it should become quite apparent that the task that was undertaken was by no means a simple one, nor was it one that was taken lightly. To inventory and to classify the more than 6,500,000 gross square feet of existing academic facilities, for example, required considerable time and effort and was not a simple task.

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*Chapter 257, Section 2, Page 908.

Specifically, the study was subdivided into four major components (1) the collection and classification of existing data concerning students, staff and space, (2) the joint development of appropriate and equitable space factors and ratios, (3) the establishment of enrollment estimates for the academic year 1972-73, and (4) the procedural steps and calculations combining the above items into a summary report of future requirements as outlined under "Procedures...Part 1" of this study. It should be further noted that a quality as well as a quantity analysis of existing buildings was made and incorporated into the body of this report. Likewise detailed documents including floor plans, student schedules and staff data are available in support of the summary data herein presented.

The results, summarized under Parts 2 and 3 of the study, are indicative of the pressing need to provide--now--for the future. Approximately $240 million dollars, at today's prices, will have had to be converted into acceptable facilities prior to the Fall of 1972 if the higher education needs of Indiana's youth are to have been met. Delays in appropriations will result in increased dollars due to the normally expected inflationary trends in the costs of construction. Likewise, sufficient "lead time" for planning and construction of new facilities, and the rehabilitation and alteration of present facilities is most imperative, if the undesirable affects of short-range planning, resulting in crises and emergency solutions, are to be avoided.

Of this $240 million total, approximately 77 per cent would be allocated for new construction to provide additional facilities and to replace over 600,000 square feet of temporary World War II and pre-war facilities considered unsafe and/or too expensive for proper rehabilitation. In addition, 5 per cent is requested for alteration of obsolete facilities in existing satisfactory structures; 3 per cent for rehabilitation to provide adequate lighting, ventilation, etc., in acceptable, but older facilities; 13 per cent for utilities to include power, heat, light, water, distribution systems, etc.; and 2 per cent for land acquisition. If the above monies are budgeted, less than 100 square feet of useable space will have been provided per student for the proper conduct of his academic pursuits. At the same time the student will have been paying for more than 150 square feet of residential, recreational, and health facilities as a part of his room and board fees.

The ability to adequately plan for the future is so tied to legislative appropriations that this ten year plan of action was considered most essential to the proper conduct of University and College affairs, and was, therefore, presented as a whole in place of biennial parts. Likewise, adequate biennial plans are necessary to minimize the lead time required for the allocation of funds, detail architectural planning, awarding of contracts, construction, occupancy, and alteration of vacated facilities in order to meet the anticipated needs of the future. Funds are required now for the future if long-range planning objectives are to be effectively realized.

PROCEDURES FOR CALCULATING AND DISTRIBUTING CAPITAL FUNDS AMONG INDIANA'S FOUR STATE SUPPORTED INSTITUTIONS OF HIGHER EDUCATION THROUGH THE YEAR 1972-1973

For each institution in the study:

A. CLASSIFY AND DEFINE DATA

1. Departments: Academic, overhead or excluded
2. Buildings: Demolish, alter, remodel or satisfactory
3. Space: Classroom, laboratory, office, etc.
4. Staff: Academic, admin., clerical, service, etc.
5. Students: Grad, undergrad, law, etc.

B. COLLECT DATA AS OF 1 OCTOBER

1. Student contact hours by department and/or subject field
2. Full-time equivalent staff by department
3. Student enrollment
4. Space inventory by department and building
5. Quality analysis of buildings
6. Library DATA - Numbers of bound volumes by location

C. FORECAST ENROLLMENT AS OF 1 OCTOBER 1972

D. DEVELOP APPROPRIATE SPACE-FACTORS AND ENROLLMENT RATIOS

E. CALCULATE SPACE REQUIREMENTS THROUGH THE YEAR 1972 USING APPROPRIATE RATIOS AND SPACE FACTORS

F. SUBTRACT FROM 1972 SPACE REQUIREMENTS THE SPACE AVAILABLE AS OF 1 OCTOBER EXCEPT FOR BUILDINGS TO BE DEMOLISHED

(Areas in buildings to be demolished not included)

G. CALCULATE DOLLARS FOR NEW CONSTRUCTION

1. Convert from assignable square feet to gross square feet
   (Gross square feet = 1.67 times assignable square feet)
2. Convert gross area to dollars ($28.06 per gross square foot - adjusted to 1964 New Construction Project Cost.)

H. ADD TO THIS AMOUNT DOLLARS FOR ALTERATIONS

75% of New Construction Contract Costs times Gross Area of Alterations -
(75% of $23.38 per gross sq. ft. - adjusted to 1964 New Construction Contract Cost.)

I. ADD TO THIS AMOUNT DOLLARS FOR REHABILITATION

50% of New Construction Contract Costs times Gross Area of Rehabilitation -
(50% of $23.38 per gross sq. ft. - adjusted to 1964 New Construction Contract Cost.)

PROCEDURES FOR CALCULATING AND DISTRIBUTING CAPITAL FUNDS (Continued)

J. ADD AMOUNT FOR UTILITY DISTRIBUTIONS SYSTEMS AND POWER PLANT CONSTRUCTION - To be determined by Consultants, or Physical Plant Professional Engineering.

K. ADD AMOUNT FOR LAND ACQUISITION

(Land coverage by buildings should be limited to an average of 20% of gross land area, in order to ensure adequate light, air and spaciousness appropriate to the campus.)

L. SUBTRACT FUNDS AVAILABLE FOR NEW CONSTRUCTION (ANY APPROPRIATED BUT UNSPENT BALANCES NOT ACCOUNTED FOR IN CURRENT INVENTORY OF FACILITIES)

This is the total funds required for new construction at 1964 price levels, but not adjusted for price level variations which may result by 1972-73.

M. SUM ABOVE AMOUNTS FOR GRAND TOTAL

The completion of these steps will provide each institution's total dollars for capital appropriations, through the year 1972.

N. TO CALCULATE THE PERCENTAGE DISTRIBUTION, ADD ALL FOUR SCHOOLS' DOLLARS TOGETHER AND COMPUTE THE PERCENTAGE FOR EACH INSTITUTION.

- -

NOTE: For each biennium an adjustment for inflationary costs of construction must be made. (An estimated 3 Index Points per year. The construction costs index used is the one published in the F. W. Dodge Reports.)

8 June 1964 (Rev.)
JFB/WCS

STANDARD CLASSROOM LAYOUT -- TYPE A

TOTAL SQUARE FEET*
(SQ. FT. PER STATION IN PARENTHESES)

PEDESTAL-MOUNT TABLET-ARM CHAIRS WITH MULTIPLE AISLES

1. 10'-0" from front wall to back of first chair.
2. Chairs spaced from 2'-8" to 2'-10" back-to-back, and on 3'-0" centers laterally.
3. 3'-9" from right wall to center of right chair; 2'-6" from left wall to center of left chair.
4. Cross aisle if more than 7 chairs long, or if more than 1 door.
5. Chalkboards on front and right walls.

WIDTH OF ROOM	NO. OF CHAIRS	3	4	5	6	7	8	9	10	11	12
	FEET(MIN.)	12¼	15¼	18¼	21¼	24¼	27¼	30¼	33¼	36¼	39¼
LENGTH OF ROOM											
NO. OF CHAIRS	MIN.&MAX. DIMENSION										
1	10'- 6"	129 (42.9)	160 (40.0)	192 (38.3)	223 (37.2)	255 (36.4)	286 (35.8)	318 (35.3)	349 (34.9)	381 (34.6)	412 (34.3)
2	13'- 2" 13'- 4"	162 (27.1)	202 (25.3)	242 (24.2)	282 (23.5)	321 (23.0)	361 (22.6)	401 (22.3)	441 (22.0)	480 (21.8)	520 (21.7)
3	15'-10" 16'- 2"	196 (21.8)	244 (20.3)	292 (19.5)	340 (18.9)	388 (18.5)	436 (18.2)	484 (17.9)	532 (17.7)	580 (17.6)	628 (17.4)
4	18'- 6" 19'- 0"	230 (19.1)	286 (17.9)	342 (17.1)	398 (16.6)	455 (16.2)	511 (16.0)	567 (15.8)	623 (15.6)	680 (15.4)	736 (15.3)
5	21'- 2" 21'-10"	263 (17.6)	328 (16.4)	392 (15.7)	457 (15.2)	521 (14.9)	586 (14.6)	650 (14.5)	715 (14.3)	779 (14.2)	844 (14.1)
6	23'-10" 24'- 8"	297 (16.5)	370 (15.4)	443 (14.8)	515 (14.3)	588 (14.0)	661 (13.8)	734 (13.6)	806 (13.4)	879 (13.3)	952 (13.2)
7	26'- 6" 27'- 6"	331 (15.8)	412 (14.7)	493 (14.1)	574 (13.7)	655 (13.4)	736 (13.1)	817 (13.0)	898 (12.8)	979 (12.7)	1060 (12.6)
8**	32'- 2" 33'- 4"	401 (16.7)	499 (15.6)	598 (14.9)	696 (14.5)	794 (14.2)	892 (13.9)	991 (13.8)	1089 (13.6)	1187 (13.5)	1285 (13.4)
9**	34'-10" 36'- 2"	435 (16.1)	541 (15.0)	648 (14.4)	754 (14.0)	861 (13.7)	967 (13.4)	1074 (13.3)	1180 (13.1)	1287 (12.9)	1393 (12.9)
10**	37'- 6" 39'- 0"	469 (15.6)	583 (14.6)	698 (14.0)	813 (13.5)	928 (13.3)	1042 (13.0)	1157 (12.9)	1272 (12.7)	1387 (12.6)	1501 (12.5)
11**	40'- 2" 41'-10"	502 (15.2)	625 (14.2)	748 (13.6)	871 (13.2)	994 (12.9)	1117 (12.7)	1240 (12.5)	1363 (12.4)	1486 (12.3)	1609 (12.2)
12**	42'-10" 44'- 8"	536 (14.9)	667 (13.9)	798 (13.3)	930 (12.9)	1061 (12.6)	1192 (12.4)	1323 (12.3)	1455 (12.1)	1586 (12.0)	1717 (11.9)

Sept. 1956

* Based on mid-point of listed range length.
** Dimensions allow for cross aisle.

STANDARD CLASSROOM LAYOUT -- TYPE B

TOTAL SQUARE FEET
(SQ. FT. PER STATION IN PARENTHESES)

CONVENTIONAL ARRANGEMENT OF TABLET-ARM CHAIRS IN SOLID ROWS

1. 10'-0" from front wall to backs of chairs in first row.
2. Chairs spaced 3'-0" back-to-back and on 2'-0" centers laterally.
3. a) Less than 7 chairs wide: 6'-0" total aisle, measured from center of chair.
   b) 7 or more chairs wide: 8'-0" total aisle, measured from center of chair.
4. Chalkboards on front and right walls.

WIDTH OF ROOM	NO. OF CHAIRS	5	6	7	8	9	10	11	12	13	14
	FEET (MINIMUM)	14	16	18	22	24	26	28	30	32	34
LENGTH OF ROOM NO. OF CHAIRS	FEET* (±0'-6")										
4	22	308 (15.4)	352 (14.7)	396 (14.1)	484 (15.1)	528 (14.7)	572 (14.3)	616 (14.0)	660 (13.8)	704 (13.5)	748 (13.4)
5	25	350 (14.0)	400 (13.3)	450 (12.9)	550 (13.8)	600 (13.3)	650 (13.0)	700 (12.7)	750 (12.5)	800 (12.3)	850 (12.1)
6	28	392 (13.1)	448 (12.4)	504 (12.0)	616 (12.8)	672 (12.4)	728 (12.1)	784 (11.9)	840 (11.7)	896 (11.5)	952 (11.3)
7	31	434 (12.4)	496 (11.8)	558 (11.4)	682 (12.2)	744 (11.8)	806 (11.5)	868 (11.3)	930 (11.1)	992 (10.9)	1054 (10.8)
8	34	476 (11.9)	544 (11.3)	612 (10.9)	748 (11.7)	816 (11.3)	884 (11.1)	952 (10.8)	1020 (10.6)	1088 (10.5)	1156 (10.3)
9	37**	518 (11.5)	592 (11.0)	666 (10.6)	814 (11.3)	888 (11.0)	962 (10.7)	1036 (10.5)	1110 (10.3)	1184 (10.1)	1258 (10.0)
10	40**	560 (11.2)	640 (10.7)	720 (10.3)	880 (11.0)	960 (10.7)	1040 (10.4)	1120 (10.2)	1200 (10.0)	1280 (9.8)	1360 (9.7)
11	43**	602 (10.9)	688 (10.4)	774 (10.1)	946 (10.8)	1032 (10.4)	1118 (10.2)	1204 (10.0)	1290 (9.8)	1376 (9.6)	1462 (9.5)
12	46**	644 (10.7)	736 (10.2)	828 (9.9)	1012 (10.5)	1104 (10.2)	1196 (10.0)	1288 (9.8)	1380 (9.6)	1472 (9.4)	1564 (9.3)
13	49**	686 (10.6)	784 (10.1)	882 (9.7)	1078 (10.4)	1176 (10.1)	1274 (9.8)	1372 (9.6)	1470 (9.4)	1568 (9.3)	1666 (9.2)
14	52**	728 (10.4)	832 (9.9)	936 (9.6)	1144 (10.2)	1248 (9.9)	1352 (9.7)	1456 (9.5)	1560 (9.3)	1664 (9.1)	1768 (9.0)

* Deduct 2'-6" (for absence of aisle across center or rear) if not more than 7 chairs wide or if only one door.

** The floor behind the 8th row should slope, i.e., step, upward.

Sept. 1956

STANDARD CLASSROOM LAYOUT - TYPE C

TOTAL SQUARE FEET
(SQ. FT. PER STATION IN PARENTHESES)

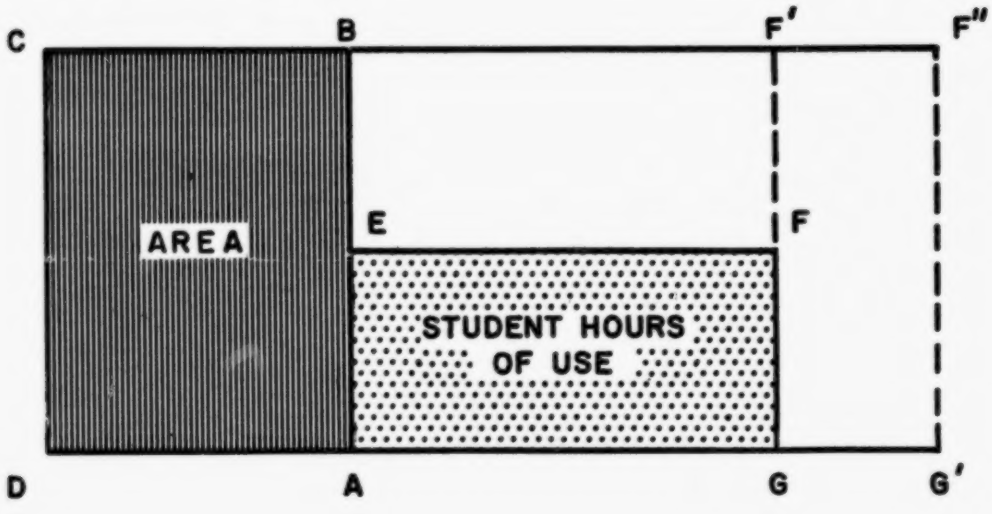
CONVENTIONAL ARRANGEMENT OF TABLET-ARM CHAIRS IN SOLID ROWS

1. 10'0" from front wall to backs of chairs in first row.
2. Chairs spaced 3'0" back to back and on 2'0" centers laterally.
3. 6" from back of last row of chairs to the rear wall.
4. a) Less than 7 chairs wide: 6'0" total aisle, measured from center of chair
   b) 7 or more chairs wide: 8'0" total aisle, measured from center of chair.
5. Chalkboards on fron walls only.

WIDTH OF ROOM	COL.CHRS.	5	6	7	8	9	10	11	12
	FEET	14	16	18	22	24	26	28	30
LENGTH OF ROOM ROWS CHAIRS	FEET (±0' 6")								
4	19'6"	273 (13.6)	312 (13.0)	351 (12.5)	429 (13.4)	468 (13.0)	507 (12.7)	546 (12.4)	585 (12.2)
5	22'6"	315 (12.6)	360 (12.0)	405 (11.6)	495 (12.4)	540 (12.0)	585 (11.7)	630 (11.5)	675 (11.3)
6	25'6"	357 (11.9)	408 (11.3)	459 (10.9)	561 (11.7)	612 (11.3)	663 (11.1)	714 (10.8)	765 (10.6)
7	28'6"	399 (11.4)	456 (10.8)	513 (10.5)	627 (11.2)	684 (10.9)	741 (10.6)	798 (10.4)	855 (10.2)
8	31'6"	441 (11.0)	504 (10.5)	567 (10.1)	693 (10.8)	756 (10.5)	819 (10.2)	882 (10.0)	945 (9.9)

COMPOSITE AND ELEMENTAL SPACE MEASURES

CHART A



A. SPACE FACTOR - COMPOSITE MEASURE OF SPACE

Area (square feet) per student hours of use (ABCD/AEFG)

B. ELEMENTAL MEASURES OF SPACE

1. Square feet per station (AD)
2. Hours of room use (AG)
3. Station occupancy
   a. Percent station use for a particular hour of use: $\frac{AE}{AB} \times 100\%$
   b. Percent station use, when room is in use:
   $$\frac{AEFG}{ABF'G} \times 100\% = \frac{\text{student hours of use}}{\text{student station hours available when room in use}} \times 100\%$$
   c. Percent station use, total
   $$\frac{AEFG}{ABF''G'} \times 100\% = \frac{\text{student hours of use}}{\text{total student station hours available for use}}$$

C. DESCRIPTION OF GRAPH.

1. AB = number of student stations available in the room.
2. AD = square feet per student station available in the room.
3. ABCD = AB x AD = net area of the room.
4. AE = number of student stations in use.
5. AG = number of room hours of use.
6. AEFG = AE x AG = student hours of use.
7. ABF'G = number of student station hours available, when the room is in use.
8. AG' = total number of room hours available for use.
9. ABF''G' = total number of student station hours available for use.

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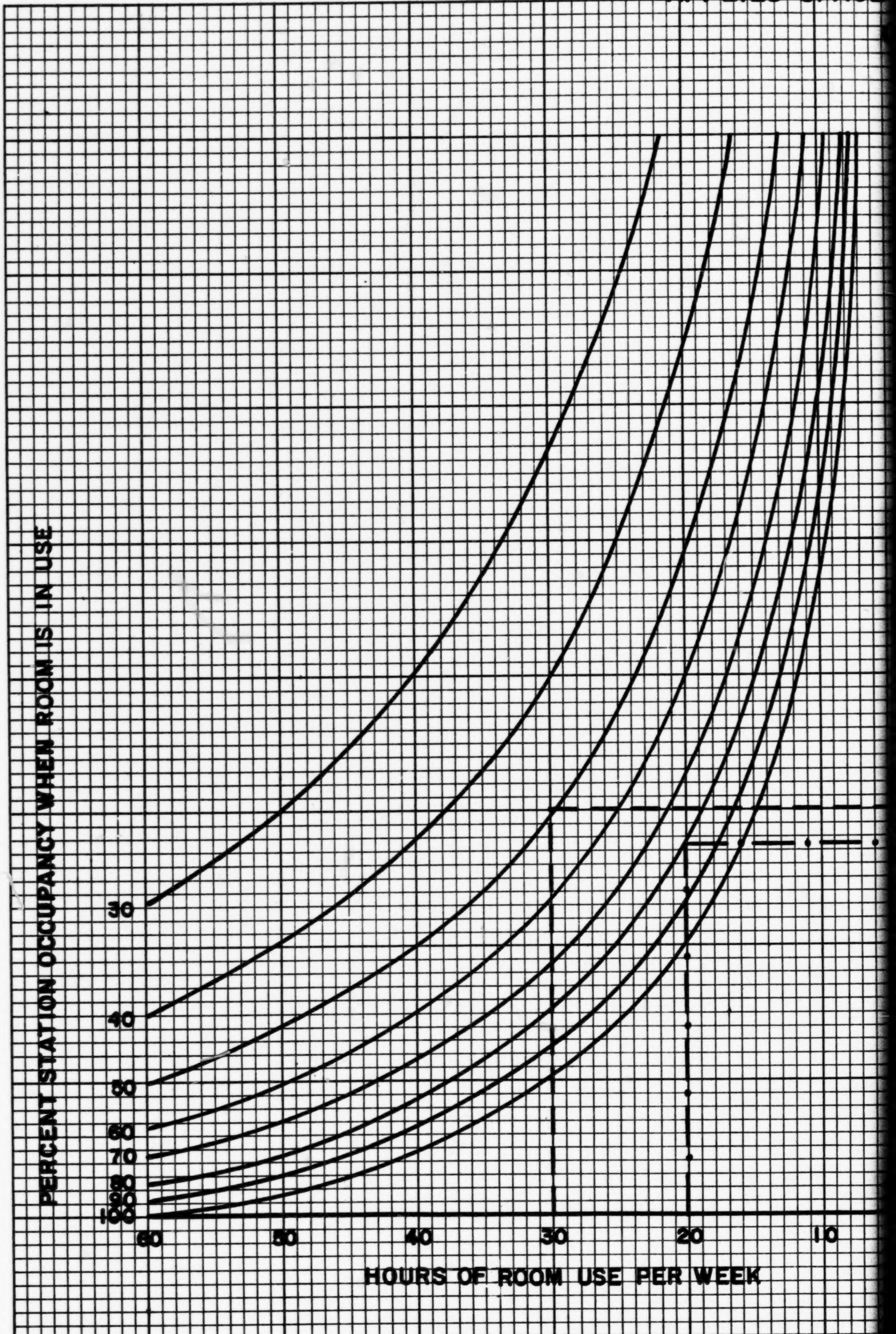
APPLIED SPACE



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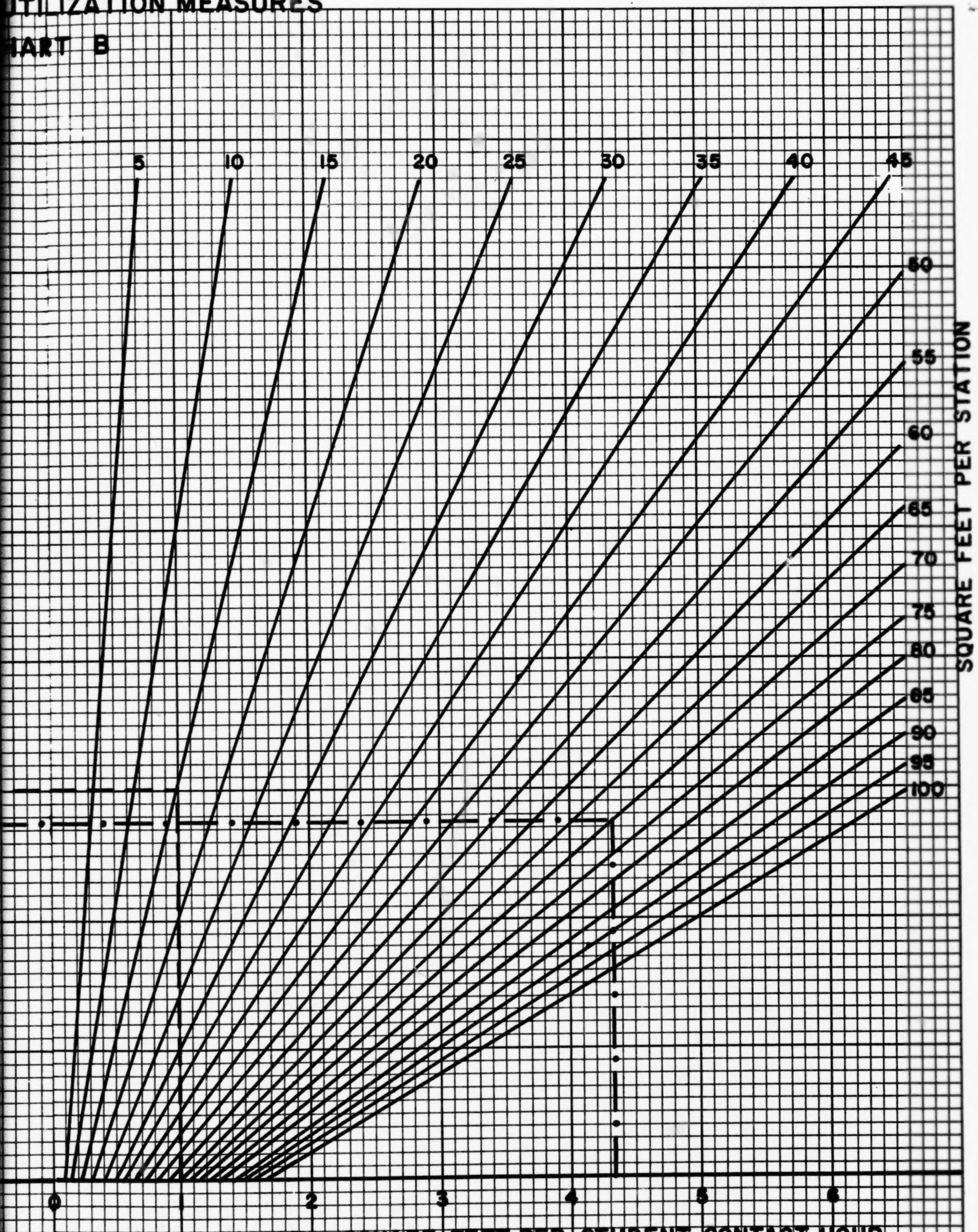
UTILIZATION MEASURES

HART B



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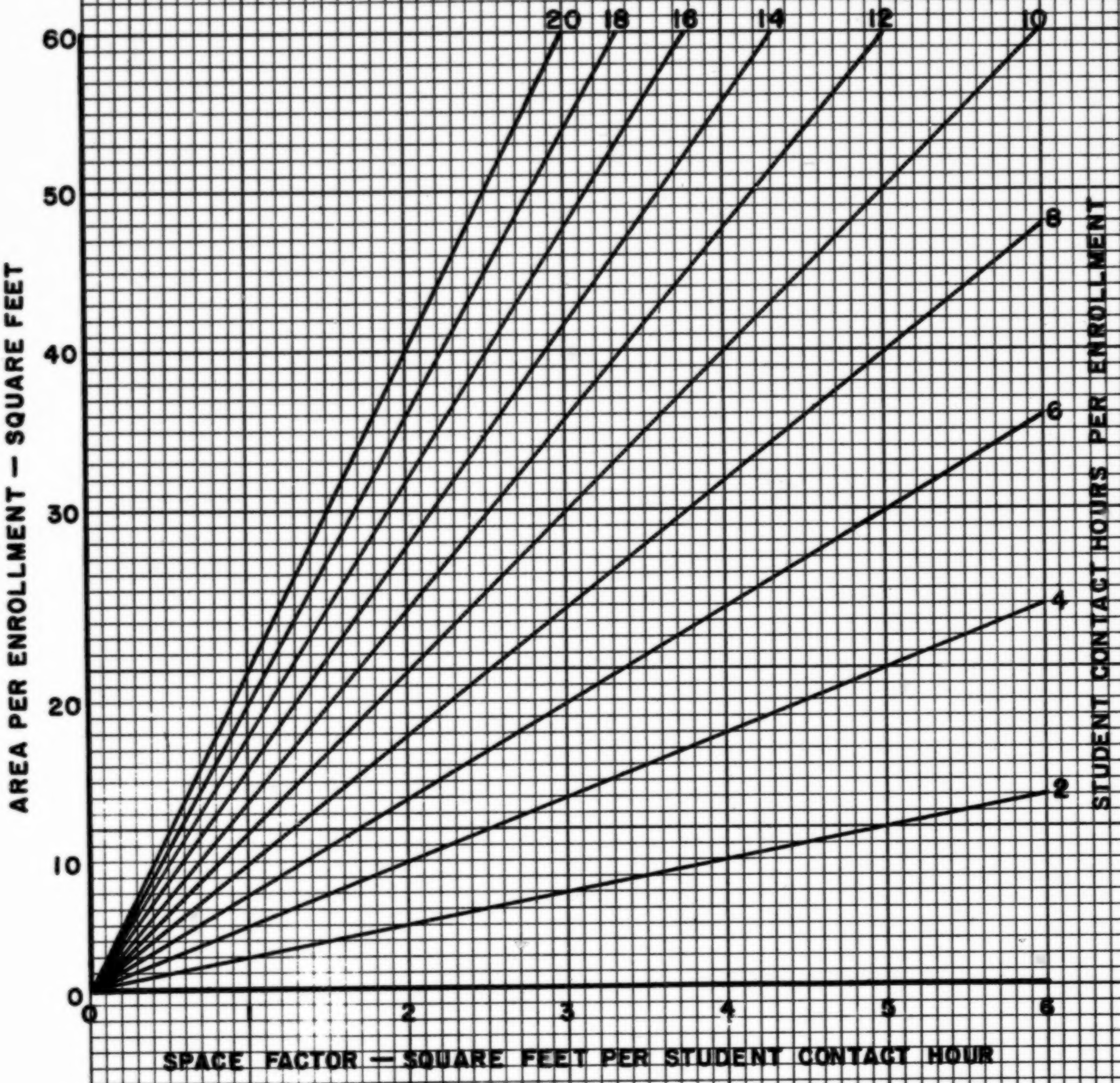
AREA REQUIREMENTS CORRECTED FOR STUDENT LOAD VARIATIONS

CHART C



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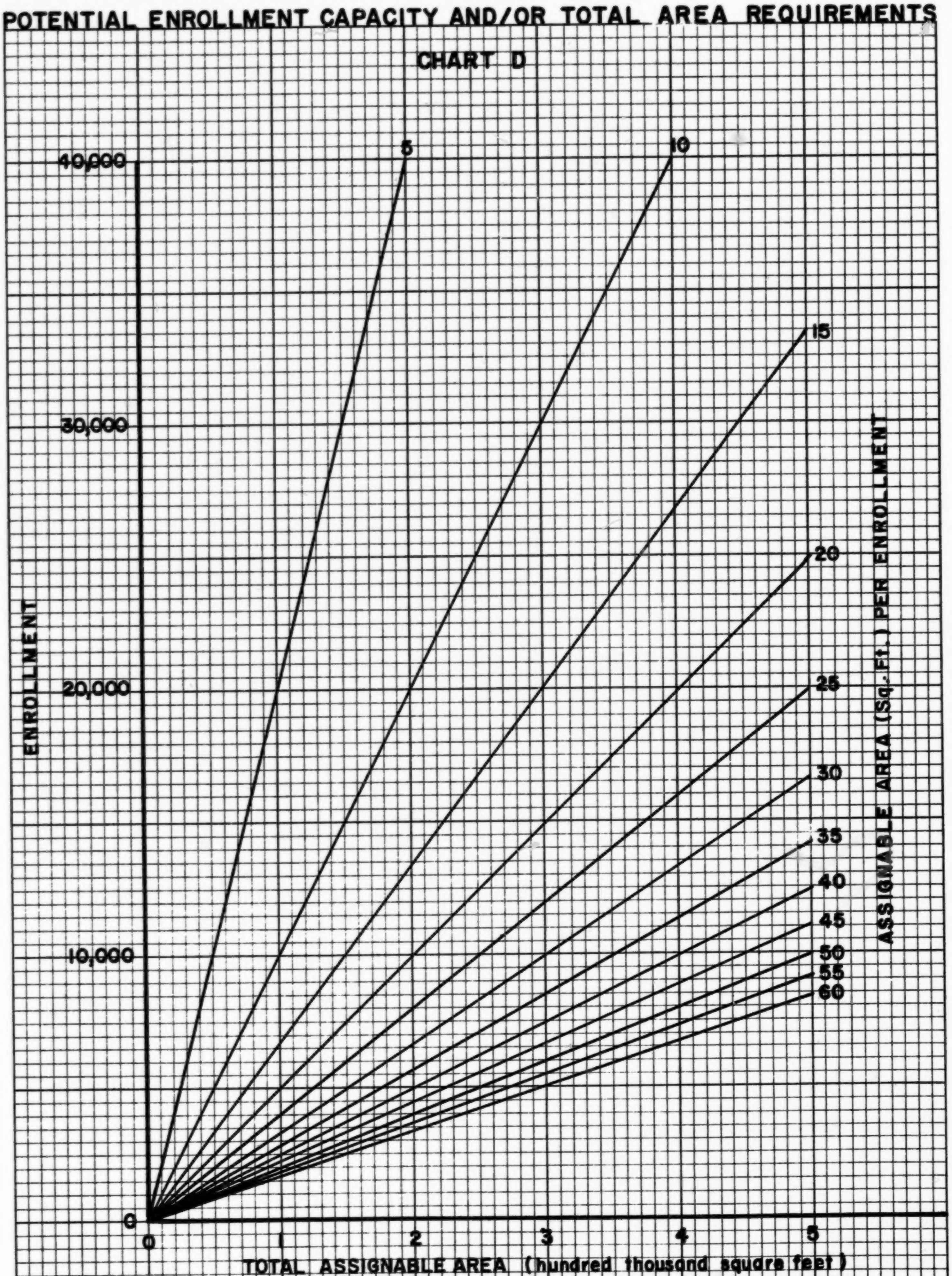
POTENTIAL ENROLLMENT CAPACITY AND/OR TOTAL AREA REQUIREMENTS

CHART D



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SPACE FACTORS*

TYPE SPACE	SPACE FACTOR	USE LEVEL
[A] Classrooms Seminar Rooms Auditoriums Auditorium Service	One (1) square foot per student contact hour requiring type [A] space.	15 sq. ft. per station. 30 hours of room use. 50 per cent station use.
[B] Teaching Laboratories Teaching Lab. Service Armory Armory Service	Four and one half (4.5) square feet per student contact hour requiring type [B] space.	67.4 sq. ft. per station. 20 hours of room use. 75 per cent station use. (Basically same use as for type [A] space but 4.5 times the area per station).
[C] Music Practice	One and eight-tenths (1.8) square feet per student contact hour requiring type [C] space.	72 sq. ft. perstation. 40 hours of room use. 100 per cent station use.
[D] Music Studio	Twelve and four tenths (12.4) square feet per student contact hour requiring type [D] space.	248 sq. ft. per station. 20 hours of room use. 100 per cent station use.
[E] Gymnasium Gymnasium Service	Fifteen and seven tenths (15.7) square feet per student contact hour requiring type [E] space.	157 sq. ft. per station. 20 hours of room use. 50 per cent station use.
[F] Library		
1. Study Hall	Three and five tenths(3.5) square feet for each undergraduate, graduate, and law student enrolled.	15 sq. ft. per station. 25 per cent of student body using the facility at any one time.
2. Stack	One tenth (0.1) square foot per bound volume.	
3. Carrel	Three and five tenths(3.5) additional square feet for each law and graduate student enrolled.	15 sq. ft. per station. 25 per cent of law and graduate enrollment using carrel space at any one time.
4. Library Science	Thirty two (32) per cent of the sum of the calculated Study Hall and Carrel areas.	
5. Museum Museum Service	One (1) per cent of the total academic space.	

TYPE SPACE	SPACE FACTOR
[G] Research Laboratory Research Service Animal Quarters Greenhouse	Square feet of assignable space per FTE "professional academic" staff grouped by subject field research classification. (see below)

Research Classifications	Square feet per FTE Staff
Administrative Units	0
Social Sciences & Humanities	10
Behavioral Sciences requiring Laboratories	100
Engineering and Physical Sciences	300
Life Sciences	600

TYPE SPACE	SPACE FACTOR
[H] Office	One hundred twenty (120) square feet of assignable space per FTE staff requiring office space.
[I] Office Service	Sixteen (16) square feet of assignable space per FTE staff requiring office space.
[J] Conference Commons	Four (4) square feet of assignable space per FTE staff requiring office space.
[K] Storage	Two (2) per cent of the total academic space.
[L] Shop	Included as part of Research Service if it is utilized for instruction and research, otherwise it will be included in Administrative Overhead.

*These factors were developed in cooperation with Mr. Edward Bocko, Indiana State College; Mr. Phillip Conklin, Ball State Teachers College; and Dr. William Fuller, Indiana University.

Example of Space Factor Development
(See Chart A)

MUSIC PRACTICE SPACE FACTOR

Alternative I.

A. Include only normal daytime student contact hours (Practice Hours) required to obtain credit for the course.

ELEMENTS

1. 100% Station Utilization - since most music practice rooms have only one (1) station and therefore, they have either zero (0) or 100 per cent station utilization at any one hour.
2. Forty (40) hours per week room use.
3. Seventy-two (72) square feet per station.

Composite Space Factor Calculation

$$\frac{72 \text{ sq. ft.}}{40 \text{ hrs. use}} \div 100\% = 1.8 \text{ square feet/student contact hour}$$

Alternative II

A. Same as A above.

B. Include both normal daytime and evening student contact hours (practice hours) required to obtain credit for the course.

ELEMENTS

1. Same as A_1 above.
2. Sixty (60) hours per week room use.
3. Same as A_3 above.

Composite Space Factor Calculation

$$\frac{72 \text{ sq. ft.}}{60 \text{ hrs. use}} \div 100\% = 1.2 \text{ square feet/student contact hour}$$

Presently, the space factor for Music Practice Rooms is as set out above under "Alternative I". If consideration is to be given to a change in the accounting of student contact hours to include evening hours, (practice hours) for music practice rooms, then the space factor should be revised as set out above under "Alternative II".

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PURDUE UNIVERSITY

SPACE PROJECTIONS

		1963 Fall Data	1963 Space Factor	1963 Space Calculation	1963 Space Inventory	1963 Difference	1963 Projection Ratio	1972 Space Calculation
A	Classrooms	224,769	1.0	224,769	218,192	(6,577)		
B	Teaching Labs	85,516	4.5	384,822	432,841	48,019		
C	Music Practice		1.2					
D	Music Studio		12.4					
E	Gym	7,529	15.7	118,205	64,355	(53,850)		
F1	Office (Except CES)	3,083.1	140.0	431,648				
F2	Office CES	197.1	140.0	27,594			112%	30,905
	Sub Total F1 & F2			459,242	416,838	(42,404)		
G1	Research - 0	142.7	0.0					
	- 1	677.7	10.0	6,777				
	- 2	105.2	100.0	10,520				
	- 3	922.6	300.0	276,810				
	- 4	463.1	600.0	277,860				
	Total G1 Research			571,967				
G2	Research (CES)							
	- 0	7.4	0.0					
	- 1	94.5	10.0	945				
	- 2	4.0	100.0	400				
	- 3	14.1	300.0	4,230				
	- 4		600.0					
	Total G2 Research			5,575			112%	6,244
	Total Research			577,542	549,235	(28,307)		
	Total A-G Except F2 & G2			1,731,411	1,681,461	(49,950)	1.562[1]	2,704,464

CRP/WFS
April 8, 1964

Purdue University
Space Projections

		1963 Fall Data	1963 Space Factor	1963 Space Calculation	1963 Space Inventory	1963 Difference	1963 Projection Ratio	1972 Space Calculation
H	Library							
	1. Study Hall	17,473	3.5	61,156	67,319	6,163	1,562[1]	95,526
	2. Carrel	3,600	3.5	12,600	7,770	(4,830)	1,896[2]	23,890
	Sub-Total			73,756	75,089	10,993	119,416	119,416
	3. Library Serv		32% of (H 1 & 2)	23,602	42,354	18,752	32% of (H 1 & 2)	38,213
	4. Stack	535,462(624,462)	.1	53,546	68,240	14,694	2.0	107,092
	Sub-Total H			150,904	185,683	34,779		264,721
	Sub-Total A-H			1,945,484	1,867,144	(48,340)		3,006,334
I	Museum		1% of A - H	19,155	6,298	(12,857)	1% of A - H	30,063
J	Storage		2% of A - H	38,310	55,776	17,466	2% of A - H	60,126
K	Other Space				62,768	62,768		
	Total Academic A-K			1,972,949	1,991,986	(19,037)		3,096,523
L	Overhead		12% of A - H	236,754	226,937	9,817	12% of A - H	371,582
	Total A-L			2,209,703	2,218,923	(9,220)		3,468,105

[1] Total extimated enrollment Fall 1972/Total enrollment Fall 1963 (27,294/17,473) = 1.562

[2] Estimated graduate enrollment Fall 1972/Graduate enrollment Fall 1963 (6,825/3,600) = 1.8958

CRP/WFS
April 8, 1964

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CALCULATION OF PURDUE UNIVERSITY PHYSICAL FACILITY CAPITAL REQUIREMENTS THROUGH 1972

Estimated Total Enrollment 1972-73	27,294
Estimated Graduate Enrollment 1972-73	6,825
Estimated Overhead Percentage	12%
Fall 1972, Calculated Assignable Area	3,648,105
Less Fall 1963 Inventory, Satisfactory, Alter, or Remodel Academic and Overhead Space	2,026,130
New Construction Required Through 1972	(1,441,975 sq. ft.)
Dollars For New Construction	$67,570,949
(Area X 1.67 x 28.06 x 100% = $46.86)	
Dollars For Alteration	(2,594,483 sq. ft.)
(Area X 1.67 x 22.93 x 75% = $28.72)	$7,452,352
Dollars For Rehabilitation	(308,572 sq. ft.)
(Area X 1.67 x 22.93 x 50% = $19.15)	$5,908.228
Dollars For Utilities	$17,049,250
Dollars Expended	$2,521,030
Adjusted Dollars Available (1.06167)	$15,424,175
SUB TOTAL	$96,355,704
Less Dollars Made Available to July 1965 and Not Represented in Inventory and Utilities	$7,132,400
GRAND TOTAL - Capital Requirements in Terms of 1964 Dollars	$89,223,304*

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* This is roughly 10 million dollars each year (at 1964 price levels) for each of the next eight years.

1 June 64
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PURDUE UNIVERSITY
OFFICE OF THE REGISTRAR

PRELIMINARY ENROLLMENT REPORT FOR FIRST SEMESTER 1963-1964

FINAL REPORT
LAFAYETTE CAMPUS

CURRICULUM	FRESHMAN 1	 2	SOPHOMORE 3	 4	JUNIOR 5	 6	SENIOR 7	 8	 9	OTHER	TOTAL
AVIATION ELECTRONICS TECHNOLOGY											
SINGLE MEN	17	2	7	3							29
MARRIED MEN	2	1		1							4
TOTAL	19	3	7	4							33
AVIATION MAINTENANCE TECHNOLOGY											
SINGLE MEN	43	13	40	18							114
MARRIED MEN	2	1	2	1							6
TOTAL	45	14	42	19							120
INDUSTRIAL ILLUSTRATION TECHNOLOGY											
SINGLE MEN	18	17	15	4							54
SINGLE WOMEN				1							1
MARRIED MEN		1	2	2							5
TOTAL	18	18	17	7							60
NURSING TECHNOLOGY											
SINGLE WOMEN	24										24
MARRIED WOMEN	5										5
TOTAL	29										29
PROFESSIONAL PILOT TRAINING											
SINGLE MEN		9		7	1						17
MARRIED MEN		5		3							8
TOTAL		14		10	1						25
TOTAL TECHNOLOGY											
SINGLE MEN	78	41	62	32	1						214
SINGLE WOMEN	24			1							25
MARRIED MEN	4	8	4	7							23
MARRIED WOMEN	5										5
TOTAL	111	49	66	40	1						267
FRESHMAN ENGINEERING											
SINGLE MEN	1316	57	376	39	24	1					1813
SINGLE WOMEN	14		1								15
MARRIED MEN	59	21	15	6	5		2				108
TOTAL	1389	78	392	45	29	1	2				1936
AERONAUTICAL ENGINEERING											
SINGLE MEN			50	17	42	25	40	15	8		197
SINGLE WOMEN			2				1				3
MARRIED MEN				5	4	3	4	5	2		23
TOTAL			52	22	46	28	45	20	10		223

	1	2	3	4	5	6	7	8	9	OTHER	TOTAL
AGRICULTURAL ENGINEERING											
SINGLE MEN			10	3	15	3	6	1	3		41
MARRIED MEN			1		2	1	1	2	3		10
TOTAL			11	3	17	4	7	3	6		51
CHEMICAL ENGINEERING											
SINGLE MEN			55	13	68	51	66	33	6		292
SINGLE WOMEN						2					2
MARRIED MEN			1	1	6	4	9	7	1		29
TOTAL			56	14	74	57	75	40	7		323
CIVIL ENGINEERING											
SINGLE MEN			51	34	75	49	64	33	11		317
SINGLE WOMEN			1			1			1		3
MARRIED MEN				6	9	14	13	11	2		55
TOTAL			52	40	84	64	77	44	14		375
ELECTRICAL ENGINEERING											
SINGLE MEN		1	169	50	190	119	171	74	19		793
MARRIED MEN			37	7	44	38	73	27	5		231
MARRIED WOMEN					1						1
TOTAL		1	206	57	235	157	244	101	24		1025
ENGINEERING SCIENCES											
SINGLE MEN			17	6	20	16	16	22	1		98
SINGLE WOMEN							2				2
MARRIED MEN					2	2	2	2			8
TOTAL			17	6	22	18	20	24	1		108
INDUSTRIAL ENGINEERING											
SINGLE MEN			22	22	44	21	30	18	4		161
SINGLE WOMEN			1		1						2
MARRIED MEN			3		4	3	5	5	3		23
MARRIED WOMEN								1			1
TOTAL			26	22	49	24	35	24	7		187
MECHANICAL ENGINEERING											
SINGLE MEN			118	65	176	89	140	35	20		643
SINGLE WOMEN						1					1
MARRIED MEN			4	7	8	13	25	16	6		79
TOTAL			122	72	184	103	165	51	26		723
METALLURGICAL ENGINEERING											
SINGLE MEN			5	3	22	9	10	7	2		58
MARRIED MEN			1	1	1		3				6
MARRIED WOMEN					1						1
TOTAL			6	4	24	9	13	7	2		65
TOTAL ENGINEERING											
SINGLE MEN	1316	58	873	252	676	383	543	238	74		4413
SINGLE WOMEN	14		5		1	4	3		1		28
MARRIED MEN	59	21	62	33	85	78	137	75	22		572
MARRIED WOMEN					2			1			3
TOTAL	1389	79	940	285	764	465	683	314	97		5016

	1	2	3	4	5	6	7	8	9	OTHER	TOTAL
AGRICULTURE											
SINGLE MEN	261	20	271	38	175	32	146	19	15		977
SINGLE WOMEN	21		17	1	7		3				49
MARRIED MEN	5	3	14	5	14	10	31	7	12		101
MARRIED WOMEN				1	1						2
TOTAL	287	23	302	45	197	42	180	26	27		1129
FORESTRY											
SINGLE MEN	48	8	33	11	31	10	19	8			168
SINGLE WOMEN		1		1							2
MARRIED MEN	1	1	3	3			4	2			14
TOTAL	49	10	36	15	31	10	23	10			184
HOME ECONOMICS											
SINGLE MEN	7	8	7	3	5	2	7	1			40
SINGLE WOMEN	202	27	154	38	141	13	111	20			706
MARRIED MEN				1		1	1	1			4
MARRIED WOMEN		3	9	2	4	3	12	7			40
TOTAL	209	38	170	44	150	19	131	29			790
HUMANITIES,SOCIAL SCIENCE,+ EDUCATION											
SINGLE MEN	187	62	275	124	291	83	203	57	37		1319
SINGLE WOMEN	427	25	416	55	433	42	250	15	12		1675
MARRIED MEN	4	6	8	18	22	22	54	15	12		161
MARRIED WOMEN	9	11	6	27	24	11	33	13	1		135
TOTAL	627	104	705	224	770	159	540	100	62		3291
INDUSTRIAL EDUCATION											
SINGLE MEN	14	23	21	37	35	28	23	14	8		203
SINGLE WOMEN							1	1			2
MARRIED MEN	4	2	3	4	13	14	15	15	1		71
TOTAL	18	25	24	41	48	42	39	30	9		276
INDUSTRIAL MANAGEMENT											
SINGLE MEN					35	48	81	26	8		198
MARRIED MEN					4	5	19	9	3		40
TOTAL					39	53	100	35	11		238
PHARMACY											
SINGLE MEN			61	8	78	12	74	9	1		243
SINGLE WOMEN			27		27	1	22	1			78
MARRIED MEN			1	1	4	3	16	4	2		31
MARRIED WOMEN					1		3				4
TOTAL			89	9	110	16	115	14	3		356
PHYSICAL EDUCATION FOR MEN											
SINGLE MEN	40	6	33	10	45	8	34	7	6		189
MARRIED MEN	1	2	6	1	8	5	15	5	4		47
TOTAL	41	8	39	11	53	13	49	12	10		236
SCIENCE											
SINGLE MEN	351	26	215	42	233	43	153	33	24		1120
SINGLE WOMEN	218	7	120	15	103	11	59	4	2		539
MARRIED MEN	2	2	4	4	12	13	25	10	6		78
MARRIED WOMEN	2	2	2	2	8	3	3	2	2		26
TOTAL	573	37	341	63	356	70	240	49	34		1763

	1	2	3	4	5	6	7	8	9	OTHER	TOTAL
TEMPORARY											
SINGLE MEN										38	38
SINGLE WOMEN										49	49
MARRIED MEN										50	50
MARRIED WOMEN										94	94
TOTAL										231	231
UNCLASSIFIED											
SINGLE MEN	47	10	12	2	4	3					78
SINGLE WOMEN	6	2	2								10
MARRIED MEN	2	4				1					7
MARRIED WOMEN	3										3
TOTAL	58	16	14	2	4	4					98
TOTAL UNDERGRADUATES											
SINGLE MEN	2349	262	1863	559	1609	652	1283	412	173	38	9200
SINGLE WOMEN	912	62	741	111	712	71	449	41	15	49	3163
MARRIED MEN	82	49	105	77	162	152	317	143	62	50	1199
MARRIED WOMEN	19	16	17	32	40	17	51	23	3	94	312
TOTAL	3362	389	2726	779	2523	893	2100	619	253	231	13875
VETERINARY SCIENCE											
SINGLE MEN	37		36		23		21				117
SINGLE WOMEN	7		2				1				10
MARRIED MEN	11		19		17		23				70
MARRIED WOMEN					1		1				2
TOTAL	55		57		41		46				199
GRADUATE											
SINGLE MEN	877	368	1	4	18				1	30	1299
SINGLE WOMEN	201	43		2						22	268
MARRIED MEN	804	753		27	22					102	1708
MARRIED WOMEN	169	39	1	23	1					92	325
TOTAL	2051	1203	2	56	41				1	246	3600
GRAND TOTAL											
SINGLE MEN	3263	630	1900	563	1650	652	1304	412	174	68	10616
SINGLE WOMEN	1120	105	743	113	712	71	450	41	15	71	3441
MARRIED MEN	897	802	124	104	201	152	340	143	62	152	2977
MARRIED WOMEN	188	55	18	55	42	17	52	23	3	186	639
TOTAL	5468	1592	2785	835	2605	893	2146	619	254	477	17674

ENROLLMENT PROJECTIONS *

Purdue University (Lafayette Campus)

Fall Semester Projections

Fall Semester	Freshmen	Sophomore	Junior	Senior	Graduate	Total
1962	4016	4200	3144	2507	3305	17,172**
1963	3982	3505	3416	2972	3600	17,475**
1964	5083	3465	2963	3478	3925	18,914
1965	5709	4319	2847	2903	4250	20,028
1966	5507	4865	3565	2790	4550	21,277
1967	5617	4783	4023	3493	4850	22,766
1968	5577	4775	3870	3942	5175	23,339
1969	6037	4736	3948	3792	5550	24,063
1970	6243	5136	3915	3869	5950	25,113
1971	6311	5313	4251	3738	6375	25,988
1972	6535	5369	4400	4165	6825	27,294

Composite Projections ***

Academic Year						
1963-64	3985	3583	3745	2987	4462	18,762
1964-65	4922	3446	3127	3568	4850	19,913
1965-66	5514	4294	3006	2978	5225	21,017
1966-67	5326	4837	3761	2862	5613	22,399
1967-68	5435	4750	4244	3582	5975	23,986
1968-69	5398	4748	4089	4043	6375	24,653
1969-70	5835	4708	4166	3889	6838	25,436
1970-71	6033	5105	4131	3968	7350	26,587
1971-72	6106	5282	4483	3838	7887	27,596
1972-73	6320	5339	4641	4272	8438	29,010

*Does not include Veterinary Science & Medicine

** Actual

*** Composite enrollments are the average of the academic semester or quarters, plus a weighted summer session. These are the figures used in the legislative requests.

PURDUE UNIVERSITY

STUDENT CONTACT HOURS

Department by Type of Room
(First Semester 1963-64)

	INCLUDED						EXCLUDED				
School and Department	Class-rooms	Teach Labs	Music Pract	Music Stud	Gym	Total	Even-ing	Non Coll	Ind Study Enrol	Re-search Enrol	Misc
Agricultural School											
Agriculture	393					393					
Agricultural Economics	2,083	398				2,481			12	53	
Agri. Engineering	311	867				1,178			3	16	
Agronomy	1,570	1,331				2,901			14	45	
Animal Science	1,811	914				2,725			28	53	
Biochemistry	755	441				1,196			1	83	
Botany & Plant Pathology	80	216				296			9	20	
Entomology	436	515				951			6	19	
Forestry & Conservation	1,023	999				2,022			47	12	
Horticulture	316	176				492			3	24	
TOTAL	8,778	5,857				14,635			123	325	
Schools of Engineering											
Aero & Eng. Sciences	716	30				746			7	46	
Aeronautical Eng.	1,136	360				1,496			4		
Astronautics	168					168					
Chemical Eng.	2,194	1,138				3,332			156	43	
Civil Engr.	4,882	12,038				16,920			264	62	
Electrical Eng.	11,656	7,020				18,676			67	67	
Freshman Eng.	1,547	76				1,623					
E SC Eng. Sciences	5,132	303				5,435					
Geology	1,033	1,599				2,632			9		
Industrial Eng.	2,325	2,562				4,887			26	11	
Mechanical Eng.	6,266	3,068				9,334			101	85	

School and Department	INCLUDED						EXCLUDED				
	Class-room	Teach Labs	Music Pract	Music Stud	Gym	Total	Even-ing	Non Coll	Ind Study Enrol	Re-search Enrol	Misc
Schools of Engineering (contd)											
Metallurgical	757	213				970			26	17	
Nuclear Eng.	242	54				296			14	14	
TOTAL	38,054	28,461				66,515			674	345	
School of Science											
Biological Sciences	5,796	7,527				13,323			94	75	
Chemistry	15,230	14,593				29,823				166	
Physics	12,363	5,129				17,492			15	71	
Mathematics	29,877					29,877			109	22	
Statistics	1,416					1,416			4	3	
Computer Sciences	1,036					1,036				3	
TOTAL	65,718	27,249				92,967			222	340	
School of Pharmacy											
Pharmacy Admn.	411	6				417				1	
Pharmacy	938	828				1,766				24	
Bionucleonics	90	87				177				15	
Pharm. Chemistry	858	1,140				1,998				8	
Pharmacology	114	198				312				17	
Pharmacognasy	257	3				260				5	
Physical Pharmacy	54					54					
TOTAL	2,722	2,262				4,984				70	

School and Department	INCLUDED						EXCLUDED				
	Class-room	Teach Labs	Music Pract	Music Stud	Gym	Total	Even-ing	Non Coll	Ind Study Enrol	Re-search Enrol	Misc
Military Science											
Air Science	4,816	2,223				7,039					
Military Science	3,973	1,466				5,439					
Naval Science	1,121	982				2,103					
University Band	3,056					3,056					
TOTAL	12,966	4,671				17,637					
School of Industrial Management											
Economics	9,643	90				9,733	69		44	30	
Industrial Mgmt.	5,950	1,404				7,354			314		
TOTAL	15,593	1,494				17,087	69		358	30	
School of Home Economics											
Clothing and Textiles	688	1,100				1,788			28	5	
Equipment & Fam. Hous.	567	262				829			12	1	
Foods & Nutrition	589	1,346				1,935			3	7	
Home Economics	253					253					
Home Mgmt. & Fam. Econ	545	24				569			55	5	
Instit. Management	256	350				606					
TOTAL	2,898	3,082				5,980			98	18	
School of Humanities, Social Science, and Education											
Audio. & Spch. Sci.	1,221	580				1,801			92	13	
Art and Design	1,879	3,212				5,091			46		
Child Dev. & Fam. Life	857	650				1,507			65	2	

	INCLUDED						EXCLUDED				
School and Department	Class- room	Teach Labs	Music Pract	Music Stud	Gym	Total	Even- ing	Non Coll	Ind Study Enrol	Re- search Enrol	Misc
School of Humanities, Social Science, and Education (contd)											
English	17,980	2,958				20,938	92		55	2	
Education	5,726	940				6,666	1,017		657	23	
General Studies	2,961	36				2,997					
Hist. Govt. & Phil.	12,952					12,952			20		
Modern Lang.	13,556	2,690				16,246			470		
Psychology	7,793	907				8,700	349		139	84	
Sociology	5,334					5,334			33	24	
Speech	5,862	467				6,329			33	12	
Phys. Ed. - Men	1,130				1,613	2,743	21		8	1	
Phys. Ed. - Women	789				5,916	6,705					
TOTAL	78,040	12,440			7,529	98,009	1,479		1,618	161	
School of Veterinary Science and Medicine											
Vet. Anatomy									7	3	1,260
Vet. Microbiology									14	10	2,328
Vet. Phys. & Pharmacology										7	1,655
Vet. Clinics									9	2	2,366
TOTAL									30	22	7,609
Campus Extension											
Aviation Technology								3,359			
Nursing Technology								261			
Industrial Technology								28			
TOTAL								3,648			
GRAND TOTAL	224,769	85,516			7,529	317,748	1,548	3,648	3,149	1,315	7,609

April 17, 1964

CRP WCS

Purdue University
Student Contact Hours Internal Reconciliation with
Course Listing by Subject Field
First Semester 1963-64

ITEM	STUDENT CONTACT HOURS Non Lab	Lab	Total	ENROLLMENTS Indiv. Study	Research
Control Totals from Course Listings by Subject Field	230,253	100,366	330,619	3,149	1,315
Less: Totals per SCH Report	223,769	85,516	310,285	3,149	1,315
Non Collegiate Hours From Campus Extension	1,587	2,061	3,648		
Evening Hours	1,522	26	1,548		
Veterinary School Hours	2,375	5,234	7,609		
Gymnasium Hours	-0-	7,529	7,529		
Balance	-0-	-0-	-0-	-0-	-0-

22 March 64
WCS

Purdue University
Student Contact Hours Reconciliation
With Official Auditor's Report
First Semester 1963-64

ITEM	STUDENT CONTACT HOURS Non Lab	 Lab	 Total	ENROLLMENTS Indiv. Study	 Research
Totals from Auditor's Final Report	227,436	93,050	320,486	3,118	1,293
Add Items Omitted from Report:					
Nursing Technology	87	174	261		
Technical & Applied Arts	327	1,908	2,235	1	
Veterinary Anatomy	242	1,018	1,260	7	3
Veterinary Microbiology	815	1,513	2,328	14	10
Veterinary Physiol & Pharm	629	1,026	1,655		7
Veterinary Clinics	689	1,677	2,366	9	2
Industrial Tech	28	-0-	28		
GRAND TOTALS	230,253	100,366	330,619	3,149	1,315
CONTROL TOTALS FROM COURSE LISTING	230,253	100,366	330,619	3,149	1,315
BALANCE	-0-	-0-	-0-	-0-	-0-

22 March 64
WCS

Purdue University Procedures
For Generating Information
for the Four State School Capital Appropriations Study

This set of procedures concerns itself with fulfilling two objectives:

1. An alphabetical listing of student registrations within each school or college. This listing will contain the following specific information: (a) student number, (b) student name, (c) student's school or college and classification, (d) students credit hour load. Sub-totals of the number of registrations and credit hours by school and college, and grand totals of the above are to be given.

2. A list of all courses taught within each school or college. This listing will contain the following specific information: (a) the course number, (b) the total number of students enrolled in the course, (c) the number of credit hours granted for the successful completion of the course, (d) the number of lab hours of formal meetings within the course, (e) the number of non-laboratory formal hours of meeting within the course. Sub-totals of the number of credit hours and non-lab and lab student hours by department (the product of the number enrolled times the credit or student hours), and grand totals of the above for each institution are to be given.

This description of the studies that were made will start with the assumption that classes are underway--students are meeting with their instructors, in classrooms and laboratories, and two weeks have gone by so that the instructional program has "settled down" into organized activities that will continue fundamentally unchanged for the remainder of the semester. At this point a snapshot is taken of these activities, and these studies will be based on this snapshot. Since at Purdue, an electronic scheduling process is used, it is quite easy to provide information as of a certain point in time.

The step-by-step procedure for gaining this information concerns:

1. The student's schedule for the semester being studied.

2. A listing of students alphabetically by school.

3. The Registrar's final student enrollment report.

4. The catalog of courses offered for the semester being studied.

5. The class rosters for the semester being studied.

6. A list of all courses taught within each department.

Illustrations and explanations of these reports follow.

1. To give a specific illustration of the procedures developed at Purdue, David Studebaker, a junior in the School of Mechanical Engineering will be representative of a typical student in the study.

Dave is taking five courses for nineteen credit hours and he must be free to work on Saturdays. His schedule follows:

```
 866376          STUDEBAKER DAVID ALAN    M 6 ME     B960               05374
BLDG.   ROOM    TIME                          SUBJ.    COURSE  DIV.    CR.

ME      212     MWF 9.30, TH 1.30-3.20        M E       315     10     4.0
EE      315     T 12.30, W 2.30-5.20          E E       353      2     4.0
EE      254     MW 12.30                      E E       353J     1      .0
EE      226     MF 2.30                       E SC      312            4.0
CE      201     TTH 10.30                     E SC      312J     1      .0
ME      221     MWF 10.30, T 7.30-10.20       M E       370      1     4.0
REC     313     MWF 1.30                      C S       400      1     3.0
FREE            S 7.30-12.20                  TIME      890      1      .0
                                                                      19.0


                STUDEBAKER  DAVID  ALAN



PART A  1ST SEM 63-64          30JULY63                            AMT.PAID
```

2. His schedule along with the other 17,673 student schedules make up a magnetic tape that is produced as a by-product of Purdue's Academic Scheduling System (PASS). This tape is sorted alphabetically by student within each school of the university. From this sorted tape the following list is printed giving totals by school and the complete university including both the number of students and the number of credit hours generated. The total number of credit hours (269,836.0) is a control figure that will be referred to later.

A sample of this list appears in Appendix A. The sample is from the Mechanical Engineering School so that Dave's name may be found. The page containing the ME totals and a page showing the university totals are also included.

3. These totals are then compared to the Registrar's Student Enrollment Report (see Appendix B) which ties in with the number of students in each school who registered and paid fees for the semester being studied.

Note: that the total Mechanical Engineers on this and the preceding report agree (723) as does the grand total for the total university (17,674).

4. To study particular courses, however, it is necessary to find out as much as possible about each course. The starting place for this information is the catalog of courses. This catalog consists of courses that have been approved by the faculty and contains information on how the course is to be taught. Appendix C is an example of some Mechanical Engineering courses.

Since the first course on Dave's schedule was ME 315, a glance at the catalog shows us that ME 315 is a course in Heat and Mass Transfer. It has three class hours, two lab hours for four credit hours. By glancing back at Dave's schedule one may note that indeed he is in ME 315 a total of five hours of which two are consecutive, and that he is receiving four credit hours for this course. A similar example could be checked for ME 370.

Note that usually one hour of class creates one credit hour while two or three hours of lab creates one credit hour. As was stated before credit hours will be used as a control figure in the totals.

5. Now let's reconsider the magnetic tape of student schedules. If from each schedule, like Dave's, a record of each course was made then a new tape could be generated that would contain the same information but instead of 17,674 student records, it would contain five course records for Dave alone, one for each of his courses, or as it turned out 93,342 course records for the 17,674 students in the University. This large tape could then be sorted so that all the course records for each course were together. From this tape the class rosters can be produced. The class rosters for ME 315's 10 divisions are in Appendix D. Note that Dave is listed in division 10 as his schedule indicated. Also the sum of the enrollments in the divisions give a total of 117 students taking the course.

6. Then a summary of this class roster tape containing the number of students in each course and the total credit hours generated by the course could be produced. This summary could then be merged with the information from the catalog to produce the report in Appendix E. The information on the left part of this report comes directly from the catalog. Remember ME 315, which was class three, lab two, for four credit hours? The number of students and number of credit hours came from the summary of the class roster tape discussed above.

The number of class hours is a straight multiplication of the number of students by the catalog information. Note that ME 315 with 117 students has 351 (3 x 117) non lab hours, 234 (2 x 117) lab hours for 468 credit hours.

These figures are totaled by department and by total university. Now check and compare the total credit hours 269,836.0 with the total credit hours from the list of students. With this verification, consistancy between the reports is demonstrated. It is hoped that this paper also demonstrated how David Studebaker, our junior ME student is counted into the university totals.

APPENDIX A

PURDUE UNIVERSITY
LAFAYETTE CAMPUS
FIRST SEMESTER 1963 - 1964
LIST OF STUDENTS FOR CAPITAL APPROPRIATIONS STUDY

CURRICULUM	STUDENT NUMBER	STUDENT NAME	CLASS	CREDIT HOURS
	.	.	.	.
ME	786668	SCHULT THOMAS HEROLD	8	18.0
	790954	SCOTT MELVIN H JR	3	19.0
	792872	SEBACHER RALPH IGNATIUS	7	17.0
	794867	SELLS HARRY EDWARD	5	19.0
	796530	SERGEANT JOHN MARIN	7	16.0
	798881	SHAFFNER GORDON EUGENE	4	17.0
	813049	SIDES DENNIS ARTHUR	3	19.0
	813300	SIEFERT GEORGE JOSEPH	5	18.0
	817165	SIMPSON STEVEN CHARLES	6	18.0
	820446	SKINNER THOMAS JAY	5	16.7
	822602	SLOAN ROBERT ERNEST	5	16.0
	823222	SMALL JAMES ARTHUR	6	19.0
	825513	SMITH DONALD LARRY	3	19.0
	825636	SMITH DOUGLAS OSTER	7	17.0
	828880	SMITH LOWELL WILLIAM	6	16.0
	830075	SMITH RICHARD BRUCE	5	21.0
	832464	SMOLEK LOUIS F JR	6	17.0
	834996	SNYDER LYNN EDWARD	3	19.0
	835181	SNYDER ROBERT RILEY	7	19.0
	836018	SOKOLOWSKI DANIEL E	5	18.0
	837339	SOPER LAWRENCE EDWARD	5	19.0
	840489	SPEAKMAN LARRY DONALD	4	.0
	841037	SPEICHER WILLIAM ROBERT	3	16.0
	841416	SPENCER BRUCE WARNE	3	17.0
	847815	STANFA CHARLES SHERIDAN	7	18.0
	849622	STARR WAYNE ELLIOTT	6	19.0
	851093	STEDGE ANTHONY MICHAEL	3	16.0
	851139	STEELE EDWARD MC CORD	3	13.0
	852461	STEIER GERALD MICHAEL	4	17.0
	853953	STEPHAN PAUL GLENN JR	3	19.0
	854819	STEPHENSON ROBERT BAIRD	6	19.0
	855091	STERN ALFRED MORRIS	4	19.0
	855249	STERN RONALD WAYNE	8	17.0
	856362	STEVENS TRACY JAY	7	18.0
	858068	STIEFEL ALBERT PAUL	9	20.0
	858562	STILLSON TIMOTHY JAY	5	18.0
	860326	STOKES JOHN ROBERT	8	16.0
	860358	STOKES RICHARD FRANK	7	16.0
	860490	STOLLENMEYER CARL E JR	3	16.0
	861073	STONE TIM ROBERT	5	15.0
	861394	STONER MARVIN GERALD	6	16.0
	863368	STRAUB ROBERT C JR	3	16.0
	863460	STRAUSS ALAN DICKSON	6	18.7
	863466	STRAUSS LOUIS ALLEN	3	17.0
	864530	STRIKIS GUNTIS VIKTORS	7	19.0
→	866376	STUDEBAKER DAVID ALAN	6	19.0 ←
	868425	SUGA KELVIN HISASHI	6	18.7
	875406	TAFF ALBERT EDGAR	5	16.0
	:	:	:	:

APPENDIX A

PURDUE UNIVERSITY
LAFAYETTE CAMPUS
FIRST SEMESTER 1963 - 1964
LIST OF STUDENTS FOR CAPITAL APPROPRIATIONS STUDY

CURRICULUM	STUDENT NUMBER	STUDENT NAME	CLASS	CREDIT HOURS
	•	•	•	•
ME	937076	WATSON JOHN CHARLES	5	16.0
	938144	WAUGH RICHARD ALLEN	7	20.0
	939636	WEBB DONALD CARL	7	17.0
	944619	WEISS JERRY ALLEN	3	19.0
	948054	WERLE PHILIP CHARLES	4	19.0
	948689	WESNER LARRY DEAN	7	17.0
	948993	WESSEL ROBERT EDWARD	7	17.0
	950611	WESTON ALLEN HEWITT	5	14.0
	954006	WHITE FREDERICK EBENER	6	22.0
	963104	WILLIAMS DONALD EDWARD	7	16.0
	963837	WILLIAMS JERRY K	5	18.0
	968339	WILSON CECIL JAY	7	20.0
	969552	WILSON JAMES LEE	7	17.0
	980489	WOODBURN JOHN C JR	4	17.0
	981950	WOODWARD HOWARD E JR	3	20.0
	981969	WOODWARD JOHN F JR	5	15.0
	983218	WORLEY JAMES LOUIS	4	17.0
	984725	WRIGHT KENTON DOUGLAS	7	16.0
	986065	WRONA JOHN STEPHEN	7	19.0
	986280	WU TING LING	9	16.0
	988013	YANCEY LEE MELGARD	7	17.7
	988772	YAZWLL ROBERT WILLIAM	3	19.0
	989264	YENNI DONALD M JR	7	19.7
	990454	YOKAS WILLIAM HARRY	4	14.0
	990846	YORK MARVIN EUGENE	7	15.0
	991961	YOUNG MICHAEL BAU ON	3	19.0
	992818	YOUNGBLOOD JOHN ROBERT	8	16.0
	993434	YIKIMURA PAUL KAZUO	8	19.0
	994716	ZALLEN DENNIS MICHAEL	5	18.0
	996344	ZESCHKE ROBERT WILLIAM	7	18.0
	996627	ZIELINSKI MICHAEL E	3	19.0
	996636	ZIELKE CARL WILLIAM JR	7	19.0
	996813	ZIERER JOHN WARREN	7	19.0
	•	•	•	•
ME	TOTAL STUDENTS	723 TOTAL CREDIT HOURS		12217.4
		AVERAGE CREDIT HOURS		16.8

APPENDIX A

PURDUE UNIVERSITY
LAFAYETTE CAMPUS
FIRST SEMESTER 1963 - 1964
LIST OF STUDENTS FOR CAPITAL APPROPRIATIONS STUDY

CURRICULUM	STUDENT NUMBER	STUDENT NAME	CLASS	CREDIT HOURS

```
   GRAND  TOTAL  STUDENTS  17674  TOTAL CREDIT HOURS               269836.0
                                     AVERAGE CREDIT HOURS              15.2
```

APPENDIX B

PURDUE UNIVERSITY

OFFICE OF THE REGISTRAR

ENROLLMENT REPORT FOR FIRST SEMESTER 1963-64

As of September 18, 1963
Lafayette Campus

	Freshman		Sophomore		Junior		Senior				
Degree Objective	1	2	3	4	5	6	7	8	9	**Other**	**Total**
AVIATION ELECT. TECH.											
Single Men	17	2	7	3							29
Married Men	2	1		1							4
Total	19	3	7	4							33
AVIATION MAINT. TECH.											
Single Men	43	13	40	18							114
Married Men	2	1	2	1							6
Total	45	14	42	19							120
INDUST. ILLUS. TECH.											
Single Men	18	17	15	4							54
Single Women				1							1
Married Men		1	2	2							5
Total	18	18	17	7							60
NURSING TECH.											
Single Women	24										24
Married Women	5										5
Total	29										29
PROF. PILOT TECH.											
Single Men		9		7	1						17
Married		5		3							8
Total		14		10	1						25
TOTAL TECHNOLOGY											
Single Men	78	41	62	32	1						214
Single Women	24			1							25
Married Men	4	8	4	7							23
Married Women	5										5
Total	111	49	66	40	1						267
FRESHMEN ENGR.											
Single Men	1316	57	376	39	24	1					1813
Single Women	14		1								15
Married Men	59	21	15	6	5		2				108
Total	1389	78	392	45	29	1	2				1936
AERONAUTICAL ENGR.											
Single Men			50	17	42	25	40	15	8		197
Single Women			2				1				3
Married Men				5	4	3	4	5	2		23
Total			52	22	46	28	45	20	10		223
AGRICULTURAL ENGR.											
Single Men			10	3	15	3	6	1	3		41
Married Men			1		2	1	1	2	3		10
Total			11	3	17	4	7	3	6		51

Campus -2

APPENDIX B

Degree Objective	Freshman 1	2	Sophomore 3	4	Junior 5	6	Senior 7	8	9	Other	Total
CHEMICAL ENGR.											
Single Men			55	13	68	51	66	33	6		292
Single Women						2					2
Married Men			1	1	6	4	9	7	1		29
Total			56	14	74	57	75	40	7		323
CIVIL ENGR.											
Single Men			51	34	75	49	64	33	11		317
Single Women			1			1			1		3
Married Men				6	9	14	13	11	2		55
Total			52	40	84	64	77	44	14		375
ELECTRICAL ENGR.											
Single Men		1	169	50	190	119	171	74	19		793
Married Men			37	7	44	38	73	27	5		231
Married Women					1						1
Total		1	206	57	235	167	244	101	24		1025
ENGINEERING SCI.											
Single Men			17	6	20	16	16	22	1		98
Single Women							2				2
Married Men					2	2	2	2			8
Total			17	6	22	18	20	24	1		108
INDUSTRIAL ENGR.											
Single Men			22	22	44	21	30	18	4		161
Single Women			1		1						2
Married Men			3		4	3	5	5	3		23
Married Women								1			1
Total			26	22	49	24	35	24	7		187
MECHANICAL ENGR.											
Single Men			118	65	176	89	140	35	20		643
Single Women						1					1
Married Men			4	7	8	13	25	16	6		79
Total			122	72	184	103	165	51	26		723 ←
METALLURGICAL ENGR.											
Single Men			5	3	22	9	10	7	2		58
Married Men			1	1	1		3				6
Married Women					1						1
Total			6	4	24	9	13	7	2		65
TOTAL ENGINEERING											
Single Men	1316	58	873	252	676	383	543	238	74		4413
Single Women	14		5		1	4	3		1		28
Married Men	59	21	62	33	85	78	137	75	22		572
Married Women					2			1			3
Total	1389	79	940	285	764	465	683	314	97		5016
AGRICULTURE											
Single Men	261	20	271	38	175	32	146	19	15		977
Single Women	21		17	1	7		3				49
Married Men	5	3	14	5	14	10	31	7	12		101
Married Women				1	1						2
Total	287	23	302	45	197	42	180	26	27		1129

APPENDIX B

	Freshman		Sophomore		Junior		Senior				
Degree Objective	1	2	3	4	5	6	7	8	9	Other	Total
FORESTRY											
Single Men	48	8	33	11	31	10	19	8			168
Single Women		1		1							2
Married Men	1	1	3	3			4	2			14
Total	49	10	36	15	31	10	23	10			184
HOME ECONOMICS											
Single Men	7	8	7	3	5	2	7	1			40
Single Women	202	27	154	38	141	13	111	20			706
Married Men				1		1	1	1			4
Married Women		3	9	2	4	3	12	7			40
Total	209	38	170	44	150	19	131	29			790
HUM., SOC. SCI., & ED.											
Single Men	187	62	275	124	291	83	203	57	37		1319
Single Women	427	25	416	55	433	42	250	15	12		1675
Married Men	4	6	8	18	22	22	54	15	12		161
Married Women	9	11	6	27	24	12	33	13	1		136
Total	627	104	705	224	770	159	540	100	62		3291
INDUSTRIAL ED.											
Single Men	14	23	21	37	35	28	23	14	8		203
Single Women							1	1			2
Married Men	4	2	3	4	13	14	15	15	1		71
Total	18	25	24	41	48	42	39	30	9		276
INDUSTRIAL MGT.											
Single Men					35	48	81	26	8		198
Married Men					4	5	19	9	3		40
Total					39	53	100	35	11		238
PHARMACY											
Single Men			61	8	78	12	74	9	1		243
Single Women			27		27	1	22	1			78
Married Men			1	1	4	3	16	4	2		31
Married Women					1		3				4
Total			89	9	110	16	115	14	3		356
PHYSICAL ED. FOR MEN											
Single Men	40	6	33	10	45	8	34	7	6		189
Married Men	1	2	6	1	8	5	15	5	4		47
Total	41	8	39	11	53	13	49	12	10		236
SCIENCE											
Single Men	351	26	215	42	233	43	153	33	24		1120
Single Women	218	7	120	15	103	11	59	4	2		539
Married Men	2	2	4	4	12	13	25	10	6		78
Married Women	2	2	2	2	8	3	3	2	2		26
Total	573	37	341	63	356	70	240	49	34		1763
TEMPORARY											
Single Men										38	38
Single Women										49	49
Married Men										50	50
Married Women										231	231

APPENDIX B

Degree Objective	Freshmen 1	2	Sophomore 3	4	Junior 5	6	Senior 7	8	9	Other	Total
UNCLASSIFIED											
Single Men	47	10	12	2	4	3					78
Single Women	6	2	2								10
Married Men	2	4				1					7
Married Women	3										3
Total	58	16	14	2	4	4					98
TOTAL UNDERGRADS											
Single Men	2349	262	1863	559	1609	652	1283	412	173	38	9200
Single Women	912	62	741	111	712	71	449	41	15	49	3163
Married Men	82	49	105	77	162	152	317	143	62	50	1199
Married Women	19	16	17	32	40	18	51	23	3	94	313
Total	3362	389	2726	779	2523	893	2100	619	253	231	13875
VET. SCI. & MED.		First Year		Second Year			Third Year			Fourth Year	
Single Men		37		36			23			21	117
Single Women		7		2						1	10
Married Men		11		19			17			23	79
Married Women							1			1	2
Total		55		57			41			46	199
GRADUATE *											
Single Men											1299
Single Women											268
Married Men											1708
Married Women											325
Total											3600*
GRAND TOTAL											
Single Men											10616
Single Women											3441
Married Men											2977
Married Women											640
Total											17674 ←

APPENDIX C

CATALOG FILE SEM. Q 1963-64 8/28/63

Page 1
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					CL	LAB	CR		
57	M E	200	3.	THERMODYNAMICS I	4-	0	-3		
57	ME	285	0.	INDUSTRIAL PRACTICE I	-		-0		
57	M E	286	0.	INDUSTRIAL PRACTICE II	-		-0		
57	M E	287	0.	INDUSTRIAL PRACT III	-		-0		
57	M E	288	0.	INDUSTRIAL PRACT IV	-		-0		
57	M E	289	0.	INDUSTRIAL PRACT V	-		-0		
57	M E	302	3.	THERMODYNAMICS IIA	3-	0	-3		
57	M E	304	3.	THERMODYNAMICS IIB	3-	0	-3		
57	M E	305	3.	GEN THERMODYNAMICS I	3-	0	-3		
57	M E	306	3.	GEN THERMODYNAMICS II	3-	0	-3		
57	M E	307	3.	ELEM OF THERMODYNAMIC	3-	0	-3		
57	M E	310	4.	FLUID MECHANICS	3-	2	-4		
57	M E	310L	-.	LABORATORY ONLY		02			
57	M E	315	4.	HEAT MASS TRANSFER A	3-	2	-4		
57	M E	316	3.	DOMES HEAT AIR COND	3-	0	-3		
57	M E	317	4.	HEAT MASS TRANSFER B	3-	3	-4		
57	M E	340	3.	MEASUREMENTS COMPUTERS	2-	3	-3		
57	M E	360	2.	INTRO TO ENGR DES	1-	3	-2		
57	M E	370	4.	MACH ANAL & DESIGN	3-	3	-4		
57	M E	407	3.	HEAT TRAN FLUID FLOW	3-	0	-3		
57	M E	416	3.	HEATING AND AIR COND	3-	0	-3		
57	M E	417	3.	COMMER INDUS AIT COND	2-	2	-3		
57	M E	421	3.	REFRIGERATION	3-	0	-3		
57	M E	430	3.	POWER PLANT ENGR	3-	0	-3		
57	M E	433	3.	PRIN TURBO MACHINERY	3-	0	-3		
57	M E	440	3.	INTERNAL COMBUSN ENG	3-	0	-3		
57	M E	444	2.	MECH ENGR LAB	1-	3	-2		
57	M E	451	3.	JET PROPULS POWER PLT	3-	0	-3		
57	M E	452	3.	PROP SYST SPACE FLT	3-	0	-3		
57	M E	460	4.	ENGR DESIGN A	2-	6	-4		
57	M E	461	4.	ENGR DESIGN B	2-	6	-4		
57	M E	462	4.	SYST DES ANAL	2-	6	-4		
57	M E	470	5.	MACHINE DESIGN	3-	6	-5		
57	M E	470L	-.	LABORATORY ONLY		06			
57	M E	475	3.	SYST ANAL CONTROL	2-	3	-3		
57	M E	484	2.	ENGR PROFESSION	2-	0	-2		
57	M E	490	.	DIR READ IN M E	-		-1	TO	4
57	M E	497	.	SELECTED TOPICS IN ME			1	TO	6
57	M E	499	3.	RESEARCH IN M E	-		-3	AR	
57	M E	500	3.	THERMODYNAMICS	3-	0	-3		
57	M E	505	3.	HEAT TRANSFER	3-	0	-3		
57	M E	510	3.	FLUID MECHANICS	3-	0	-3		
57	M E	522	3.	AIR COND AND REFRIG	3-	0	-3		
57	M E	525	3.	COMBUSTION	3-	0	-3		
57	M E	541	3.	DIESEL ENGINES	3-	0	-3		
57	M E	544	3.	INT COMB ENG LAB	1-	6	-3		
57	M E	545	3.	AUTOMOTIVE ENGR	3-	0	-3		
57	M E	550	3.	MISSILE SYSTEMS DESIGN	3-	0	-3		
57	M E	560	3.	KINEMATICS	3-	0	-3		
57	M E	563	3.	MECHANICAL VIBRATIONS	3-	0	-3		
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.	.	.	.	.		.			
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APPENDIX D

HEAT MASS TRANSFER A M E 315 01 09/18/63

058175	BENBOW MICHAEL STEPHEN	6	ME	4.
113797	BUDD RICHARD MICHAEL	7	ME	4.
175703	COX JAMES RODGER	6	ME	4.
447577	KAAR JOSEPH BROWN	6	ME	4.
575196	MC CORMICK WILLIAM R	7	ME	4.
612077	MOELLER JOSJEPH EDWARD	7	ME	4.
632915	MUTZL CHARLES RONALD	6	ME	4.
647456	NICOLAUS JAMES FRANCIS	7	ME	4.
661010	OLSON ERIC NELS	6	ME	4.
663033	ORME THOBURN LEE	6	ME	4.
745485	ROBERTS THOMAS ALBERT	6	ME	4.
988013	YANCEY LEE MELGARD	7	ME	4.

TOTAL 12 48.0

HEAT MASS TRANSFER A M E 315 02 09/18/63

142694	CHARLSON STEPHEN FRANK	6	ME	4.
291371	GAC CONRAD MICHAEL	6	ME	4.
390704	HIPSKIND ROBERT ALLEN	7	ME	4.
471740	KIRCHNER THOMAS JOSEPH	7	ME	4.
493222	KRUGER LEWIS WILLIAM	6	ME	4.
708956	PRENTICE JAMES ALLEN	6	ME	4.
936241	WATERMAN JEFFREY FRANK	6	ME	4.
990599	YOO CHONG YUL	1	GR	4.
996813	ZIERER JOHN WARREN	7	ME	4.

TOTAL 9 36.0

HEAT MASS TRANSFER A M E 315 03 09/18/63

006271	AITKEN JOHN DONALD II	7	ME	4.
008496	ALEXANDER CHARLES HOMER	7	ME	4.
087149	BOWERS DAVID ALAN	6	ME	4.
348449	HAMILTON WILLIAM J 2	6	ME	4.
352114	HANSEN DOUGLAS JOHN	7	ME	4.
394910	HOFFMAN JACK	7	ME	4.
503944	LANGE KENNETH PATRICK	6	ME	4.
544557	MACATHUR ROBERT IRWIN	7	ME	4.
754096	ROSCOE RICHARD DENNIS	7	ME	4.
954006	WHITE FREDERICK EBENER	6	ME	4.
954936	WHITE RONALD JAMES	5	ME	4.
969325	WILSON HARRY LEE	6	ME	4.

TOTAL 12 48.0

HEAT MASS TRANSFER A M E 315 04 09/18/63

002225	ACKMANN LAWRENCE LEE	8	ME 4.
162553	COLTART DONALD JOHNSON	7	ME 4.
248128	ENDICOTT THOMAS ARTHUR	6	ME 4.
276100	FORBES JAMES CORYDON	5	E 4.
384659	HIGDON RICHARD DALE	6	ME 4.
401375	HOOLEY STANLEY EDWARD	7	ME 4.
404410	HORTON GEORGE ALLEN	9	ME 4.
467883	KIMBLE ROBERT HAROLD	7	ME 4.
508850	LAVELLE MICHAEL ROBERT	7	ME 4.
605047	MILLER RICHARD A JR	8	ME 4.
688144	PETERS DAVID ALLEN	8	ME 4.
727948	REEF JOHN SETH	6	ME 4.
947956	WENZEL RONALD ARTHUR	7	ME 4.

TOTAL 13 52.0

HEAT MASS TRANSFER A M E 315 05 09/18/63

070705	BISHOP JAMES LESLIE	6	ME 4.
101753	BROCK GREGORY C JR	5	ME 4.
184149	CRUM PHIL HORACE	9	ME 4.
214671	DISTERDICK JOHN WILLIAM	6	ME 4.
369132	HAYS RICHARD DALE	7	ME 4.
400987	HONNOLD FRED VAN JR.	7	ME 4.
429673	JENKINS KENNETH LEE	5	ME 4.
431923	JOBE JAMES WILLIAM	7	ME 4.
485282	KOONTZ CARL ALBERT JR	7	ME 4.
549488	MALAK STEPHEN PAUL	7	ME 4.
556089	MARKS FRANKLIN LANG	7	ME 4.
694009	PHILLIPS GLEN ROBERT	7	ME 4.
948689	WESNER LARRY DEAN	7	ME 4.
968339	WILSON CECIL JAY	7	ME 4.

TOTAL 14 56.0

HEAT MASS TRANSFER A M E 315 06 09/18/63

100849	BRINKMANN HERBERT C JR	7	ME 4.
166295	CONRAD JAMES OTTO	6	ME 4.
301588	GEISSBUHLER JOHN ROBERT	6	ME 4.
363544	HASELBY KENNETH AARON	7	ME 4.
475052	KLEIN RICHARD GRANT	7	ME 4.
602114	MILLER JAN ARNOLD	7	ME 4.
654900	OBEN WILLIAM MORRIS	6	ME 4.
792872	SEBACHER RALPH IGNATIUS	7	ME 4.
849622	STARR WAYNE ELLIOTT	6	ME 4.
996344	ZESCHKE ROBERT WILLIAM	7	ME 4.

TOTAL 10 40.0

HEAT MASS TRANSFER A M E 315 07 09/18/63

024150	ARNDT MICHAEL ROBERT	6	ME 4.
102518	BROMBERG HOWARD JOEL	9	ME 4.
159288	COLBERG RICHARD ARNOLD	6	ME 4.
180418	CRIPE JAMES ALLEN	9	ME 4.
211460	DIEKEN ROGER OTTO	7	ME 4.
215355	DIXON GEORGE SCOTT JR	7	ME 4.
393547	HODGINS BRUCE JOH	6	ME 4.
541675	LUSE RICHARD WAYNE	6	ME 4.
574960	MC CORMICK ROBERT S	7	ME 4.
868425	SUGA KELVIN HISASHI	6	ME 4.

TOTAL 10 40.0

HEAT MASS TRANSFER A M E 315 08 09/18/63

098270	BRICKLEY CHARLES HOWARD	7	ME 4.
186045	CUNDIFF BRUCE T JR	7	ME 4.
294962	GAPPA FRANK WILLIAM	9	AGE 4.
312259	GLOVER RUSSELL KINSLEY	9	ME 4.
420619	INPYN ROBERT WILLIAM	6	ME 4.
540208	LUI RICHARD MICHAEL	6	ME 4.
563018	MASON MICHAEL I.	9	ME 4.
582799	MC KINNEY BRUCE DALE	6	ME 4.
639865	NEEDHAM GEORGE RONALD	7	ME 4.
715278	QUINN CHARLES NORMAN	6	ME 4.
750834	ROGERS JAMES HAROLD	7	ME 4.
878982	TAYLOR GRANDALL SIMEON	7	ME 4.
989264	YENNI DONALD M JR	7	ME 4.

TOTAL 13 52.0

HEAT MASS TRANSFER A M E 315 09 09/18/63

021292	ANSPACH GENE RICHARD	7	ME 4.
027285	ATKINSON LYNN ALLAN	7	ME 4.
136657	CARUSO CHARLES MICHAEL	6	AGE 4.
197931	DAWSON EDWIN THOMAS	6	ME 4.
437544	JOHNSON ROBERT JOSEPH 2	7	AGE 4.
521849	LEWIS JERRY LEE	6	ME 4.
614201	MONOHAN DENNIS LALLY	6	ME 4.
759154	ROWE WILLIAM HASTINGS	7	ME 4.
800753	SHARP LARRY JOSEPH	7	AGE 4.
861394	STONER MARVIN GERALD	6	ME 4.
901325	TRUEX DAVID WILLIAM	6	ME 4.

TOTAL 11 44.0

HEAT MASS TRANSFER A M E 315 10 09/18/63

083249	BOOTY ROBERT ALAN	7	ME	4.	
160428	COLE LARRY LEE	7	ME	4.	
175488	COX HERMAN LEROY	6	ME	4.	
228100	DUNAWAY ROBERT LEE	6	ME	4.	
404207	HORSMAN CHARLES DANIEL	9	ME	4.	
758117	ROTTIER FRANK	6	ME	4.	
778449	SCHIELE CARL ALBERT	7	ME	4.	
823222	SMALL JAMES ARTHUR	6	ME	4.	
854819	STEPHENSON ROBERT BAIRD	6	ME	4.	
866376	STUDEBAKER DAVID ALAN	6	ME	4.	←
925070	WAGNER ROBERT ERNEST	8	ME	4.	
969552	WILSON JAMES LEE	7	ME	4.	
984725	WRIGHT KENTON DOUGLAS	7	ME	4.	
	TOTAL 13			52.0	

APPENDIX E

PURDUE UNIVERSITY
LAFAYETTE CAMPUS
FIRST SEMESTER 1963 - 1964
COURSE INFORMATION FOR THE CAPITAL APPROPRIATIONS STUDY

..........................COURSE DESCRIPTION						....	***************COURSE TOTALS*************					
SUBJ.FIELD AND NUMBER	TITLE	CREDIT HOURS	NON-LAB HOURS	LAB HRS	RES HRS	IND HRS*	NUMBR STU	CREDIT HUURS	NON-LAB HOURS	LAB HRS	RES ENROL	IND ENRL
M E 200	THERMODYNAMICS I	3.	4.0			*	170	510.0	680.0			
285	INDUSTRIAL PRACTICE I	0.				1.0*	8					8
286	INDUSTRIAL PRACTICE II	0.				1.0*	8					8
287	INDUSTRIAL PRACT III	0.				1.0*	12					12
288	INDUSTRIAL PRACT IV	0.				1.0*	4					4
289	INDUSTRIAL PRACT V	0.				1.0*	3					3
302	THERMODYNAMICS 11A	3.	3.0			*	136	408.0	408.0			
304	THERMODYNAMICS 11B	3.	3.0			*	26	78.0	78.0			
305	GEN THERMODYNAMICS I	3.	3.0			*	79	237.0	237.0			
306	GEN THERMODYNAMICS II	3.	3.0			*	47	141.0	141.0			
307	ELEM OF THERMODYNAMIC	3.	3.0			*	270	810.0	810.0			
310	FLUID MECHANICS	4.	3.0	2.0		*	163	652.0	489.0	326.0		
315	HEAT MASS TRANSFER A	4.	3.0	2.0		*	117	468.0	351.0	234.0		
317	HEAT MASS TRANSFER B	4.	3.0	2.0		*	21	84.0	63.0	42.0		
340	MEASUREMENTS COMPUTERS	3.	2.0	3.0		*	177	531.0	354.0	531.0		
360	INTRO TO ENGR DES	2.	1.0	3.0		*	191	382.0	191.0	573.0		
370	MACH ANAL + DESIGN	4.	3.0	3.0		*	104	416.0	312.0	312.0		
407	HEAT TRAN FLUID FLOW	3.	3.0			*	117	351.0	351.0			
416	HEATING AND AIR COND	3.	3.0			*	23	69.0	69.0			
440	INTERNAL COMBUSN ENG	3.	3.0			*	26	78.0	78.0			
444	MECH ENGR LAB	2.	1.0	3.0		*	15	30.0	15.0	45.0		
451	JET PROPULS POWER PLT	3.	3.0			*	19	57.0	57.0			
452	PROP SYST SPACE FLT	3.	3.0			*	11	33.0	33.0			
460	ENGR DESIGN A	4.	2.0	6.0		*	64	256.0	128.0	384.0		
461	ENGR DESIGN B	4.	2.0	6.0		*	24	96.0	48.0	144.0		
462	SYST DES ANAL	4.	2.0	6.0		*	6	24.0	12.0	36.0		
470	MACHINE DESIGN	5.	3.0	6.0		*	19	95.0	57.0	114.0		
475	SYST ANAL CONTROL	3.	2.0	3.0		*	101	303.0	202.0	303.0		
484	ENGR PROFESSION	2.	2.0			*	99	198.0	198.0			
490	DIR READ IN M E	1. TO 4.				1.0*	1	2.0				
497	SELECTED TOPICS IN ME	1. TO 6.				1.0*	4	11.0				

APPENDIX E

PURDUE UNIVERSITY
LAFAYETTE CAMPUS
FIRST SEMESTER 1963 - 1964
COURSE INFORMATION FOR THE CAPITAL APPROPRIATIONS STUDY

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.............................COURSE DESCRIPTION...................****************COURSE TOTALS*************
SUBJ.FIELD          TITLE             CREDIT   NON-LAB  LAB  RES   IND*NUMBR  CREDIT  NON-LAB  LAB   RES   IND
AND NUMBER                             HOURS    HOURS   HRS  HRS   HRS* STU    HOURS   HOURS   HRS  ENRL  ENRL

M E  697   MECH ENGR PROJECTS            AR                        1.0*   8     23.0                         8
     698   RESEARCH M S THESIS      0.   AR                   1.0     *  23     91.0                  23
     699   RESEARCH PH D THESIS     0.   AR                   1.0     *  59    436.0                  59
     699A  RESEARCH PH D THESIS     0.                        1.0     *   3                            3

      TOTALS ...  2465 STUDENTS,    7790.0 CREDIT HOURS,        6266.0 NON LAB HRS,      3068.0 LAB HRS
                                           55 COURSES             85.0 RES ENRL.         101.0 IND ENRL
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APPENDIX E

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                           PURDUE UNIVERSITY
                            LAFAYETTE CAMPUS
                        FIRST SEMESTER 1963-64
              COURSE INFORMATION FOR THE CAPITAL APPROPRIATIONS STUDY

............................COURSE DESCRIPTION..................****************COURSE TOTALS*************
SUBJ.FIELD          TITLE         CREDIT  NON-LAB  LAB   RES  IND*NUMBR  CREDIT  NON-LAB   LAB  RES   IND
AND NUMBER                         HOURS   HOURS   HRS   HRS  HRS* STU    HOURS   HOURS    HRS ENRL  ENRL

   GRAND TOTALS...     93342 STUDENTS, 269836.0 CREDIT HOURS,    230252.6 NON LAB HRS,     100366.4 LAB HRS
                                          1656 COURSES,       1315.0 RES ENRL,             3149.0 IND ENRL
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PURDUE UNIVERSITY

Detail Library Data by Branch

	Bound Volumes	
Branch	Base Year 1961*	1964
Aeronautical Engineering	12,254	14,000
Biochemistry	6,127	7,000
Chemical & Metallurgical Engineering	6,127	7,000
Chemistry	20,131	23,000
Electrical Engineering	5,427	6,200
Horticulture	3,326	3,800
Geology	2,626	3.000
Goss Library	875	1,000
Home Economics	3,939	4,500
Industrial Engineering	4,026	4,600
Industrial Management & AGEC	17,506	20,000
Life Sciences	49,891	57,000
Mathematics	11,816	13,500
Mechanical	7,002	8,000
Pharmacy	12,692	14,500
Physics	16,193	18,500
Vet Science	8,700	8,700
Wiley Memorial (CE)	6,740	7,700
SUB TOTAL	195,398	222,000
Main Library	348,764	398,462
Total Bound Volumes	544,162	620,462
Less Vet Science Branch	8,700	8,700
	535,462	611,762

* Branch Library Volumes estimated.

20 March 64
WCS

DEFINITION OF FULL TIME EQUIVALENT STAFF

The term Full Time Equivalent Staff (FTE) defines the percentage expressing the terms of employment for an operating period between the institution and its employees. This definition implies that only employees of the institution can have a Full Time Equivalency. An individual can not have a Full Time Equivalency unless he or she owes a responsibility for service to the institution as a result of payments made to them by the institution. Staff employed and paid on an hourly basis will have their assignments expressed as a Full Time Equivalent percentage based upon the number of dollars which would normally be earned in a payment period.

The general model for calculating FTE staff is as follows:

$$FTE = \frac{(E)\ (P)\ (\%)}{S}$$

where "E", "S", "P" and "%" are conditions of the employment contract and where,

1. "%" equals the employment percentage(or relative workload) mutually agreed upon by employee and employer(i.e., if the employee were required to devote at least 20 hours per week to the position and 40 hours were a normal work week, then the employment percentage is 20 ÷ 40 X 100 or 50%)
2. "S" equals the contracted annual salary;
3. "P" equals the number of payments required to satisfy the annual salary;
4. "E" equals the dollar amount earned in one payment period.

6 June 1964

WCS

PURDUE UNIVERSITY

FULL TIME EQUIVALENT STAFF

By Department and Employee Classification

(First Semester 1963-64)

DEPARTMENT	PROFESSIONAL STAFF Research Classification 0	1	2	3	4	CLERICAL STAFF	TOTAL STAFF
Agrigultural School							
Dean of Agricultural Administration	4.4					4.0	8.4
Brazilian Assistance Program	11.6					3.5	15.1
Agriculture							
Agricultural Economics		33.3				13.7	47.0
Agricultural Engineering				12.9		4.6	17.5
Agronomy					35.1	19.2	54.3
Animal Sciences					45.1	33.6	78.7
Biochemistry					55.3	14.6	69.9
Botany and Plant Pathology					39.2	23.0	62.2
Entomology					28.3	8.5	36.8
Forestry and Conservation					28.6	5.0	33.6
Horticulture					33.8	23.5	57.3
TOTAL	16.0	33.3		12.9	265.4	145.7	480.8
Agricultural Research							
Agricultural Administration	8.5					13.5	22.0
Agricultural Information	2.5					2.1	4.6
Agricultural Statistics		.5				2.2	2.7
Agricultural Economics		12.5				3.8	16.3
Agricultural Engineering				7.6		4.7	12.3
Agronomy					24.2	19.7	43.9
Animal Sciences					17.2	16.4	33.6
Biochemistry					.3		.3
Home Economics				9.2		5.1	14.3
Veterinary					24.8	32.4	57.2
TOTAL	11.0	13.0		16.8	66.5	99.9	207.2

DEPARTMENT	PROFESSIONAL STAFF					CLERICAL STAFF	TOTAL STAFF
	Research Classification						
	0	1	2	3	4		
Agricultural Extension							
Director	7.4					3.9	11.3
Agricultural Information		7.5				16.3	23.8
Agricultural Economics		19.3				16.4	35.7
Agricultural Engineering				3.6		1.5	5.1
Agronomy		7.1				4.2	11.3
Animal Sciences		11.2				5.0	16.2
Botany		3.5				1.0	4.5
Entomology		2.7				1.0	3.7
Forestry and Conservation		6.4				1.0	7.4
Horticulture		7.5				4.0	11.5
Veterinary		2.0				.7	2.7
Home Economics				10.5			10.5
Four-H Clubs		10.7				6.2	16.9
County Agents		9.7				4.9	14.6
Home Demonstration Agents			4.0			5.0	9.0
Personnel Training		3.0				.5	3.5
Agriculture Visual Aids		3.9				5.5	9.4
TOTAL	7.4	94.5	4.0	14.1		77.1	197.1
Schools of Engineering							
Engineering Administrator	13.5					11.4	24.9
Aero and Engineering Sciences				69.6		14.8	84.4
Aeronautical Engineering							
Astronautics							
Chemical Engineering				29.1		9.2	38.3
Civil Engineering				121.7		30.1	151.9
Electrical Engineering				119.8		22.5	142.3
Freshman Engineering	4.5					2.0	6.5
E. SC. Engineering Sciences							
Geology							
Industrial Engineering				31.1		16.0	47.1

DEPARTMENT	PROFESSIONAL STAFF					CLERICAL STAFF	TOTAL STAFF
	Research Classification						
	0	1	2	3	4		
Schools of Engineering (contd.)							
Mechanical Engineering				105.6		49.9	155.5
Metallurgical Engineering				12.1		7.5	19.6
Nuclear Engineering				10.3		3.1	13.4
TOTAL	18.0			499.3		166.5	683.9
School of Science							
School of Science Administration	10.1					6.0	16.1
Biological Sciences					124.2	58.8	183.0
Chemistry				195.5		58.9	254.4
Physics				136.7		69.6	206.3
Mathematics		154.1				8.0	162.1
Statistics		11.2				2.0	13.2
Computer Science			14.0			14.3	28.3
TOTAL	10.1	165.3	14.0	332.2	124.2	217.6	863.4
School of Pharmacy							
Pharmacy Administration				23.2		5.5	28.7
Pharmacy							
Bionucleonics					7.0	1.5	8.5
Pharmaceutical Chemistry				5.6			5.6
Pharmacology							
Pharmacognasy				7.8		1.0	8.8
Physical Pharmacy							
TOTAL				36.6	7.0	8.0	51.6
Military Science							
Air Science	21.0					2.0	23.0
Military Science	30.0					2.0	32.0
Naval Science	18.0					1.0	19.0
University Band	3.0					1.3	4.3
TOTAL	72.0					6.3	78.3

DEPARTMENT	PROFESSIONAL STAFF Research Classification 0	 1	 2	 3	 4	CLERICAL STAFF	TOTAL STAFF
School of Industrial Management							
Administration		77.3				16.6	93.9
Krannert Graduate School		10.2				1.0	11.2
Economics							
Industrial Management							
TOTAL		87.5				17.6	105.1
School of Home Economics							
Home Economics Administration	4.5					6.6	11.1
Clothing and Textiles				10.5		1.6	12.1
Equipment and Family Housing				5.2		1.0	6.2
Foods and Nutrition				9.1		4.5	13.6
Home Economics							
Home Management and Family Economics			4.7			.5	5.2
Institutional Management		5.2				1.0	6.2
TOTAL	4.5	5.2	4.7	24.8		15.2	54.4
Humanities, Social Science & Education							
Administration	11.1					6.5	17.6
Audiology & Speech Science			20.9			6.0	26.9
Art and Design		14.8				1.0	15.8
Child Development & Family Life			15.5			2.0	17.5
English		99.5				6.0	105.5
Education		72.3				25.4	97.7
General Studies		1.7					1.7
History, Government & Philosophy		39.6				2.9	42.5
Modern Languages		54.3				8.0	62.3
Psychology			44.6			10.9	55.5
Sociology		23.1				4.0	27.1
Speech		35.3				4.5	39.8
Physical Education - Men		18.5				5.8	24.3
Physical Education - Women		14.3				4.0	18.3

DEPARTMENT	PROFESSIONAL STAFF Research Classification 0	1	2	3	4	CLERICAL STAFF	TOTAL STAFF
Humanities, Social Science & Education (contd.)							
Achievement Center for Children			5.5			.5	6.0
TOTAL	11.1	373.4	86.5			87.5	558.5
GRAND TOTAL	150.1	772.2	109.2	936.7	463.1	848.9	3,083.1

PURDUE UNIVERSITY
Reconciliation of F.T.E. Staff Report
and Official Auditor's F.T.E. Staff Report

	FTE STAFF REPORTED	AUDITOR
Balances Per FTE Academic Staff Reported and Auditors Report:	3083.1	3790.6
Departments which Auditor Reported Too many staff:		
English (107.2 vs 105.8)		-1.4
Excluded departments reported by Auditor:		
Carneg. Foundation (CIC)		-4.7
Library (Special Treatment)		-178.4
National Institute of Health		-1.9
Other AES Research		- .7
(Sub Total)		(-187.1)
Departments in which not enough staff were reported		
Naval Science (18.0 vs 19.0 - omitted clerical		+1.0
General Studies (1.7 vs 3.1 - omitted classified)		+1.4(Engl?)
Departments not reported by Auditor		
Univ. Extn. Adm.		+32.3
Engineering Technology		+1.0
Nurses Training		+3.0
(Sub Total)		(+38.7)
Rounding error		
Less Staff to be excluded		364.1
Plus extension (CES) staff	197.1	
CONTROL BALANCES	3280.3	3280.3

3-25-64
WCS

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          PURDUE UNIVERSITY STAFF PAYROLL DATA                 PAGE  104
     SUMMARY OF TOTAL UNIVERSITY STAFF BY POSITION
               AS OF OCTOBER 31, 1963                     APRIL 7, 1964

POSITION- - - - - - - - - - - - - - - - - - - - F.T.E.- - -TOTALS- - PERCENT

ADMINISTRATIVE STAFF
      0A ADMINISTRATIVE OFFICER                   245.0
      1A ADMINISTRATIVE ASST.                     310.2
      2A GRADUATE ASST.                            71.1

     TOTAL ADMINISTRATIVE STAFF                             626.2*        8.9

INSTRUCTIONAL STAFF
      7I HEAD PROFESSOR                            36.0
      6I PROFESSOR                                249.6
      5I ASSOC. PROFESSOR                         349.2
      4I ASST. PROFESSOR                          325.5
      3I INSTRUCTOR                               325.9
         TOTAL PROFESSIONAL INST. STAFF                    1286.3        18.4
      2I GRADUATE INSTRUCTIONAL ASST.             355.7
      1I UNDERGRAD INSTRUCTIONAL ASST.             13.3
      2T GRADUATE TEACH ASSOC.                     44.8
         TOTAL GRADUATE INST. STAFF                         413.8         5.9

     TOTAL INSTRUCTIONAL STAFF                             1700.1*       24.3

RESEARCH STAFF
      7R HEAD PROFESSOR                             4.1
      6R PROFESSOR                                 62.0
      5R ASSOC. PROFESSOR                          65.3
      4R ASST. PROFESSOR                           97.3
      3R INSTRUCTOR                               174.9
         TOTAL PROFESSIONAL RESEARCH STAFF                  403.7         5.8
      2R GRADUATE RESEARCH ASST.                  140.8
      1R UNDERGRAD RESEARCH ASST.                    .5
      2G GRADUATE ASST. IN RESEARCH               209.9
         TOTAL GRADUATE RESEARCH STAFF                      351.2         5.0

     TOTAL RESEARCH STAFF                                   754.9*       10.8

   TOTAL ADMIN., ACADEMIC AND RESEARCH STAFF               3081.3**      44.0

OTHER STAFF
      C CLERICAL-REGULAR                          947.3
      C CLERICAL-TEMPORARY                         21.8
      E ON CAMPUS EXTENSION                       101.2
          SUB-TOTAL                                        1070.3        15.3
      CE COUNTY AGENT                              61.3
      AE ASST. COUNTY AGENT                        54.2
      HE HOME DEMONSTRATION AGENT                  60.0
          SUB-TOTAL                                         175.4         2.5
      L LIBRARY                                    27.3
      S SERVICE                                  1998.9
      X XR GRADUATE ASST.                          38.1
      OTHER                                       615.2
          SUB-TOTAL                                        2679.6        38.2

     TOTAL OTHER STAFF                                     3925.4*       56.0

 UNIVERSITY TOTAL*************************************     7006.7***    100.0
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DEPARTMENT - 10361, AIR SCIENCE

POSITION- - - - - - - - - - - - - - - - - - - F.T.E.- - -TOTALS- - PERCENT

INSTRUCTIONAL STAFF
     7I HEAD PROFESSOR                          1.0
     5I ASSOC. PROFESSOR                        2.0
     4I ASST. PROFESSOR                        11.0
        TOTAL PROFESSIONAL INST. STAFF                    14.0        60.9
     2I GRADUATE INSTRUCTIONAL ASST.            7.0
        TOTAL GRADUATE INST. STAFF                         7.0        30.4

     TOTAL INSTRUCTIONAL STAFF                            21.0*       91.3

   TOTAL ADMIN., ACADEMIC + RESEARCH STAFF                21.0**      91.3

OTHER STAFF
     C CLERICAL-REGULAR                         2.0
          SUB-TOTAL                                        2.0         8.7

     TOTAL OTHER STAFF                                     2.0*        8.7

DEPARTMENTAL TOTAL*********************************       23.0***    100.0
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DEPARTMENT - 10361, AIR SCIENCE

REGULAR STAFF

BUDGET ACCT	STAFF NO	STAFF NAME	POSITION	F.T.E.
103612	03339	T W BAILEY	4I10	1.000
103612	03632	T S BAKES	4I10	1.000
103612	06493	J I BERTSCH	C12	1.000
103612	10873	L L BROWN	1C12	1.000
103612	11779	E R BULL JR	4I10	1.000
103612	13603	R J CAREY	2I10	1.000
103612	18488	D E COURTANEY	4I10	1.000
103612	23047	C E DOBBS	4I10	1.000
103612	24693	F F EBERHARDT	4I10	1.000
103612	25740	H R ENSEY	4I10	1.000
103612	48037	J B KELLY	4I10	1.000
103612	48146	M A KEMPTON	7I10	1.000
103612	49996	J F KNUDSON	2I10	1.000
103612	53768	J F LEWIS	2I10	1.000
103612	56466	R D MAHONEY	2I10	1.000
103612	61930	C F MERZ	5I10	1.000
103612	67438	C G NOWAK	2I10	1.000
103612	74638	T M REAGAN	4I10	1.000
103612	74686	K I RED ELK	2I10	1.000
103612	75301	G A REYNOLDS	5I10	1.000
103612	77946	S P ROWTON	4I10	1.000
103612	83882	J R SLAGLE	4I10	1.000
103612	91392	L P TRUSTY	2I10	1.000

TOTAL NO. REGULAR EMPLOYEES 23 TOTAL F.T.E. 23.000

PURDUE UNIVERSITY
REFERENCE LIST OF FTE STAFF
FROM PAYROLL DATA OF OCTOBER 31, 1963
JANUARY 17, 1964

STAFF NO.	EMPLOYEE NAME	FTE STAFF	POSITION CODE	DEPARTMENT NO.	DEPARTMENT NAME	PROJ NO.	BUDGET ACCOUNT
03070	R G BABINGTON	0.625	2G12	10-304	PHARMACOLOGY	3703	51-8042
03074	C H BACHE	0.357	3R12	10-206	AGEC		42-7062
		0.142	3R12	10-206	AGEC	4164	66-7062
03090	W B BACHE	1.000	5I10	10-318	ENGL		10-3182
03110	G B BACHMAN	1.000	6I10	10-344	CHM		10-3442
03119	R H BACKE	0.187	T	10-243	VMI		10-2432
03120	*N A BACKSCHEIDER	0.381	T	81-111	MEN S QUAD		81-1115
	*	0.250	1I10	10-347	MA		10-3472
03128	L A BADEAU	0.500	2A09	81-155	STU UN CTS		81-1552
03144	V V BADIGER	1.000	3R12	10-344	CHM	2931	61-8442
03152	H E BAER	1.000	S12	10-920	SERV MNT OPN		09-9202
03162	N F BAER	1.000	1A12	10-900	PP ADMIN		10-9032
03176	A E BAETSLE	0.100	T	10-380	LIBR		10-3802
03178	R J BAETSLE	1.000	2C12	10-380	LIBR		10-3802
03225	G A BAGBY	1.000	3S12	81-455	HALL X		81-4552
03227	M BAGBY	1.000	3S12	81-133	H-2		81-1333
03240	C R BAHLER MD	1.000	CA12	83-700	HEALTH CTR		83-7185
03255	B L BAHLS	1.000	3C12	81-800	HCC LUNCH		81-8003
03262	A P BAIAC JR	0.500	2A09	81-155	STU UN CTS		81-1552
03267	J J BAIER	0.250	2I10	10-322	HIST		10-3222
03278	C C BAILEY	0.250	2I10	10-280	EE		10-2802
03300	G W BAILEY	1.000	4R12	10-214	AGRY	3748	51-7142
03303	I N BAILEY	1.000	3S12	81-400	ADM-WRH		81-4003
03305	J H BAILEY	0.425	T	81-133	H-2		81-1333
03306	J J BAILEY	1.000	S12	10-960	SAFETY + SEC		09-9602
03315	L E BAILEY	1.000	5S12	80-260	MACHINE SHOP		80-2605
03325	R E BAILEY	1.000	4I12	10-289	NUCL		10-2892
03326	R L BAILEY	0.380	AE12	12-569	CO-AGENT-CES		20-5692
		0.390	AE12	12-569	CO-AGENT-CES		40-5692
03329	R L BAILEY	0.950	5S12	81-600	DIR FAM HSE		81-6002
03337	S F BAILEY	1.000	2S12	83-700	HEALTH CTR		83-7025
03339	T W BAILEY ←	1.000	4I10	10-361	AFT		10-3612
03341	V B BAILEY	0.250	2I10	10-293	IM		10-2932
		0.250	2R10	10-293	IM	0287	64-7932
03338	V M BAILEY	1.000	2S12	81-400	ADM-WRH		81-4003
03342	W K BAILEY	0.900	2S12	81-188	H-4		81-1882
03296	F P BAILEY JR	1.000	7S12	10-346	PHYS		10-3462
03344	C B BAILLIEUL	0.321	T	81-155	STU UN CTS		81-1553
03358	*C E BAIN	0.500	3I12	10-348	STAT		10-3482
	*	0.500	3R12	80-250	COMP SCI CTR		80-2505
03360	R K BAIN	1.000	4I10	10-333	SCC		10-3332
03362	R A BAITHER	0.600	T	10-900	PP ADMIN		09-9032
03364	W E BAITINGER	1.000	3R12	10-344	CHM		10-3442
03257	N C BAITY	0.127	T	10-232	VET	3600	51-7322
03359	K K BAJAJ	0.500	2I10	10-346	PHYS		10-3462
03365	S BAJAJ	0.500	2I10	10-347	MA		10-3472
03370	B L BAKER	0.250	2E12	12-575	PERSTRNG-CES		40-5752
03371	B L BAKER	1.000	3S12T	81-600	DIR FAM HSE		81-6002
03404	C L BAKER	0.340	3R12	14-705	AG STAT-AES		14-7052
03419	C E BAKER	1.000	S12	10-920	SERV MNT OPN		09-9202
03463	E E BAKER	0.500	3I10	10-335	SPE		10-3352
03466	E L BAKER	1.000	3S12	18-404	FT W CENTER		18-4362
03467	E M BAKER	1.000	2C12	10-280	EE		10-2802
03500	G A BAKER	0.500	3I12	10-231	PURDUE FARMS		10-2272
		0.170	3R12	10-231	PURDUE FARMS		80-7205
03535	K K BAKER	1.000	5S12	10-232	VET		25-7322
03548	L M BAKER	1.000	6I12	10-331	PSY		10-3312
03544	M C BAKER	1.000	XS12	81-111	MEN S QUAD		81-1112
03545	M F BAKER	0.347	T	81-155	STU UN CTS		81-1553
03575	R A BAKER	0.500	2I10	10-342	BISC		10-3422
03584	R E BAKER	1.000	1A12	10-920	SERV MNT OPN		09-9202
03585	R C BAKER	0.500	2A09	81-144	H-3		81-1442
03568	R M BAKER	1.000	3S12	81-400	ADM-WRH		81-4003
03596	S D BAKER	0.156	T	81-111	MEN S QUAD		81-1113
03620	T T BAKER	1.000	3S12	81-111	MEN S QUAD		81-1113
03632	T S BAKES ←	1.000	4I10	10-361	AFT		10-3612
03635	W C BAKKER	0.500	2I10	10-347	MA		10-3472
03637	A BAKTAY	1.000	2C12	10-327	MLS		10-3272
03638	E BAKTAY	1.000	S12	10-920	SERV MNT OPN		09-9202
03640	G Y BALADI	0.212	4S12T	10-276	CE		10-2762
		0.487	T	10-276	CE	0021	63-7762
03642	N BALASUBRAMANIN	0.500	2G12	10-288	METE	0703	63-7882
03646	P BALBACH	1.000	3R12	55-719	STATE CHEM	3311	55-7199

PURDUE UNIVERSITY
SPACE INVENTORY SUMMARY
BY TYPE OF SPACE AND BUILDING CLASSIFICATION
ASSIGNABLE SQUARE FEET
1 OCT. 1963

	BUILDING CLASSIFICATION					
TYPE SPACE	SATISFACTORY	ALTER	REMODEL	TOTAL	DEMOLISH	TOTAL
ACADEMIC						
A-CLASSROOMS	127218	43676	29028	199922	18270	218192
B-TEACHING LABS	238058	68580	63719	370357	62484	432841
C-MUSIC PRACTICE						
D-MUSIC STUDIO						
E-GYM	40436		23919	64355		64355
F-OFFICE	218117	66124	85238	369479	47359	416838
G-RESEARCH	394695	50438	66037	511170	38065	549235
SUB TOTAL A-G	1018524	228818	267941	1515283	166178	1681461
H-LIBRARY						
1. STUDY HALL	53129	8523	4712	66364	955	67319
2. CARREL	7770			7770		7770
3. LIBRARY SERV.	42310		44	42354		42354
4. STACK	61309	2074	3099	66482	1758	68240
SUB TOTAL H	164518	10597	7855	182970	2713	185683
SUB TOTAL A-H	1183042	239415	275796	1698253	168891	1867144
I-MUSEUM	6298			6298		6298
J-STORAGE	17693	10783	25492	53968	1808	55776
K-OTHER SPACE						
1. FIELD BUILDING						
2. MISCELLANEOUS	642	1242		1884	80	1964
3. UNCLASSIFIED	13342		1701	15043	661	15704
4. REMODELING	6825			6825		6825
5. HEALTH SERV.	622			622		622
6. MERCHANDISING SERV.	513			513		513
7. SHOP	24240	5019	4450	33709	3431	37140
SUB TOTAL K	46184	6261	6151	58596	4172	62768
SUB TOTAL I-K	70175	17044	31643	118862	5980	124842
TOTAL ACADEMIC A-K	1253217	256459	307439	1817115	174871	1991986
OVERHEAD	207958	3024	1133	212115	14822	226937
TOTAL ACADEMIC AND OVERHEAD	1461175	259483	308572	2029230	189693	2218923
EXCLUDED	3323825	1438	15879	3341142	292	3341434
GEN BLDG	1265279	76027	85275	1426581	37164	1463745
GRAND TOTAL	6050279	336948	409726	6796953	227149	7024102

DATE RUN APR 4,64

SCHOOL BY DEPARTMENT AND ROOM CLASSIFICATION

SCHOOL	DEPARTMENT NO. NAME	ROOM CLASSIFICATION	NO ROOMS	AREA	NO STATIONS
MILITARY SCIENCES					
	10361 AFT	OFFICE	17.0	3135	30
		OFFICE SERV	2.0	268	
*	TOTAL BY MAJOR SPACE CLASSIFICATION		19.0	3403	30
	10361 AFT	STUDY HALL	1.0	372	10
*	TOTAL BY MAJOR SPACE CLASSIFICATION		1.0	372	10
	10361 AFT	SHOP	1.0	332	1
*	TOTAL BY MAJOR SPACE CLASSIFICATION		1.0	332	1
**	TOTAL BY DEPARTMENT		21.0	4107	41
	10363 MILT	T LAB SERV	1.0	264	
*	TOTAL BY MAJOR SPACE CLASSIFICATION		1.0	264	
	10363 MILT	OFFICE	10.0	2388	35
		OFFICE SERV	7.0	1298	
*	TOTAL BY MAJOR SPACE CLASSIFICATION		17.0	3686	35
	10363 MILT	ARMORY	1.0	33140	260
		ARM SERV	5.0	4451	1
*	TOTAL BY MAJOR SPACE CLASSIFICATION		6.0	37591	261
	10363 MILT	SHOP	1.0	990	
*	TOTAL BY MAJOR SPACE CLASSIFICATION		1.0	990	
**	TOTAL BY DEPARTMENT		25.0	42531	296
	10365 NS	T LAB SERV	2.0	322	
*	TOTAL BY MAJOR SPACE CLASSIFICATION		2.0	322	
	10365 NS	OFFICE	12.0	3238	22
		OFFICE SERV	4.0	704	
		COMMONS	1.0	89	
*	TOTAL BY MAJOR SPACE CLASSIFICATION		17.0	4031	22
	10365 NS	ARMORY	2.0	5680	100
		ARM SERV	1.4	382	
*	TOTAL BY MAJOR SPACE CLASSIFICATION		3.4	6062	100
**	TOTAL BY DEPARTMENT		22.4	10415	122

DEMOLISH SPACE BY BUILDING BY FLOOR AND ROOM CLASSIFICATION

BUILDING NO. NAME	FLOOR	ROOM CLASSIFICATION	NO ROOMS	AREA	NO STATION
** TOTAL BY FLOOR			34.0	10982	48
*** TOTAL BY BUILDING			34.0	10982	48
097 FWA7	1	CUSTODIAL	4.0	102	
		REST ROOM	4.0	346	
		CIRCUL	3.0	1691	
* TOTAL BY MAJOR SPACE CLASSIFICATION			11.0	2139	
097 FWA7	1	CLASSROOM	1.0	1050	24
* TOTAL BY MAJOR SPACE CLASSIFICATION			1.0	1050	24
097 FWA7	1	OFFICE	19.0	3427	32
		OFFICE SERV	2.0	268	
* TOTAL BY MAJOR SPACE CLASSIFICATION			21.0	3695	32
097 FWA7	1	STUDY HALL	1.0	372	10
* TOTAL BY MAJOR SPACE CLASSIFICATION			1.0	372	10
097 FWA7	1	SHOP	1.0	332	1
* TOTAL BY MAJOR SPACE CLASSIFICATION			1.0	332	1
** TOTAL BY FLOOR			35.0	7588	67
*** TOTAL BY BUILDING			35.0	7588	67
098 FWA8	1	REST ROOM	2.0	65	
		CIRCUL	2.0	421	
* TOTAL BY MAJOR SPACE CLASSIFICATION			4.0	486	
098 FWA8	1	T LAB SERV	6.0	2260	21
* TOTAL BY MAJOR SPACE CLASSIFICATION			6.0	2260	21
098 FWA8	1	OFFICE	7.0	876	9
		OFFICE SERV	1.0	20	
		COMMONS	1.0	50	
* TOTAL BY MAJOR SPACE CLASSIFICATION			9.0	946	9
098 FWA8	1	SHOP	1.0	248	2
		STORAGE	1.0	507	
* TOTAL BY MAJOR SPACE CLASSIFICATION			2.0	755	2

BUILDING NO	BUILDING NAME	FL.	RM.NO.	AREA	PER CNT.	DEPARTMENT NO.	DEPARTMENT NAME	CLASSIFICATION NO.	CLASSIFICATION NAME	STA.	DESCRIPTION
097	FWA7	1	003	172		10361	AFT	31	OFFICE	1	HEAD OF DEPT
			005	146		98850	VOC REHAB	31	OFFICE	1	C
			006	223		10361	AFT	31	OFFICE	2	I
			007	140		98850	VOC REHAB	31	OFFICE	1	A
			008	372		10361	AFT	41	STUDY HALL	10	CADET + UNSR LIB
			009	144		10361	AFT	31	OFFICE	1	I
			010	220		10361	AFT	31	OFFICE	2	CADET COMDT
			011	164		10361	AFT	31	OFFICE	1	I
			012	175		10361	AFT	31	OFFICE	4	CADET OFFICE
			013	160		10361	AFT	31	OFFICE	1	I
			014	192		10361	AFT	31	OFFICE	4	CADET OFFICE
			015	155		10361	AFT	31	OFFICE	1	I
			016	164		10361	AFT	31	OFFICE	1	I
			017	133		10361	AFT	31	OFFICE	1	I
			018	164		10361	AFT	31	OFFICE	1	I
			019	135		10361	AFT	31	OFFICE	1	I
			020	147		99999	GEN BLDG	02	REST ROOM	0	MENS TOILET
			020B	22		99999	GEN BLDG	01	CUSTODIAL	0	JANITORS SUPPLIES
			021	164		10361	AFT	31	OFFICE	1	I
			021A	164		10361	AFT	31	OFFICE	1	I
			022	301		10361	AFT	31	OFFICE	3	A
			023	332		10361	AFT	81	SHOP	1	A AUDIO VISUAL
			024	365		10361	AFT	31	OFFICE	4	A
			025	135		10361	AFT	31-	OFFICE SERV	0	SUPPLY ROOM
			026	1050		10101	GEN ACAD	11	CLASSROOM	24	AFT 10361CV 6
			027	133		10361	AFT	31-	OFFICE SERV	0	COFFEE ROOM
			028	88		99999	GEN BLDG	02	REST ROOM	0	ENTRANCE TO TOILET
			028A	12		99999	GEN BLDG	02	REST ROOM	0	MENS TOILET
			029	99		99999	GEN BLDG	02	REST ROOM	0	MENS TOILET
			029B	9		99999	GEN BLDG	01	CUSTODIAL	0	JANITORS SUPPLIES
			030	47		99999	GEN BLDG	01	CUSTODIAL	0	JANITORS CLOSET
			031	24		99999	GEN BLDG	01	CUSTODIAL	0	JANITORS CLOSET
			097	173		99999	GEN BLDG	04	CIRCUL	0	HALL
			098	408		99999	GEN BLDG	04	CIRCUL	0	HALL
			099	1110		99999	GEN BLDG	04	CIRCUL	0	HALL

35 CARDS*1ST FL TOTALS 7,588 SQ. FT. 35.0 ROOMS 67 STATIONS

35 CARDS** BLDG TOTALS 7,586 SQ. FT. 35.0 ROOMS 67 STATIONS

DEPARTMENT NO.	NAME	CLASSIFICATION NO.	NAME	BUILDING NO.	NAME	RM.NO.	FL.	AREA	PER CNT	STA.	DESCRIPTION
10361	AFT	31	OFFICE	97	FWA7	003	1	172		1	HEAD OF DEPT
				97	FWA7	006	1	223		2	I
				97	FWA7	009	1	144		1	I
				97	FWA7	010	1	220		2	CADET COMDT
				97	FWA7	011	1	164		1	I
				97	FWA7	012	1	175		4	CADET OFFICE
				97	FWA7	013	1	160		1	I
				97	FWA7	014	1	192		4	CADET OFFICE
				97	FWA7	015	1	155		1	I
				97	FWA7	016	1	164		1	I
				97	FWA7	017	1	133		1	I
				97	FWA7	018	1	164		1	I
				97	FWA7	019	1	135		1	I
				97	FWA7	021	1	164		1	I
				97	FWA7	021A	1	164		1	I
				97	FWA7	022	1	301		3	A
				97	FWA7	024	1	305		4	A
17			17.0					3,135		30*	
17			17.0					3,135		30**	
10361	AFT	31-	OFFICE SERV	97	FWA7	025	1	135		0	SUPPLY ROOM
				97	FWA7	027	1	133		0	COFFEE ROOM
2			2.0					268		0*	
2			2.0					268		0**	
19			19.0					3,403		30***	
10361	AFT	41	STUDY HALL	97	FWA7	008	1	372		10	CADET + UNSR LIBR
1			1.0					372		10*	
1			1.0					372		10**	
1			1.0					372		10***	
10361	AFT	81	SHOP	97	FWA7	023	1	332		1	A AUDIO VISUAL
1			1.0					332		1*	
1			1.0					332		1**	
1			1.0					332		1***	
21			21.0					4,107		41****	

* TOTAL SPECIFIC SPACE WITHIN A BUILDING FOR THIS DEPARTMENT
** TOTAL SPECIFIC SPACE FOR THIS DEPARTMENT
*** TOTAL RELATED SPACE FOR THIS DEPARTMENT
**** TOTAL DEPARTMENTAL SPACE

```
COURSE      TYPE  SECTION                                              CLASS
DESCRIPTION CLASS NUMBER  TIME  DAY, HOUR, AND (WEEKS)      BLDG ROOM  SIZE    INSTRUCTER-NAME           NUMBER

                                                          SECTIONS  STUDENTS  AVG. CL. SIZE
                                                             10        23          2

AGRY 699A RESEARCH PH D THESIS   CREDIT   0.        .

            RES    1          ARRANGE     01     HOUR                    1    W H DANIEL                20601

            RES    2          ARRANGE     01     HOUR                    1    D   SWARTZENDRUBER        88826

            RES    3          ARRANGE     01     HOUR                    1    J L WHITE                 95591

                                                          SECTIONS  STUDENTS  AVG. CL. SIZE
                                                             3         3           1

AFT  110  BASIC AIR FORCE TRAIN  CREDIT   2.        .           CLASS   2

            PRIM   1    M   F  07.30                   EE   170   120    E R BULL                  11779

            PRIM   2    M   F  08.30                   EE   170   122    E R BULL                  11779

            PRIM   3    M   F  12.30                   EE   170   119    E R BULL                  11779

            PRIM   4    M   F  01.30                   EE   170   120    E R BULL                  11779

            PRIM   5     T T   10.30                   EE   170   120    J B KELLY                 48037

            PRIM   6     T T   11.30                   EE   170   118    J B KELLY                 48037

            PRIM   7     T T   03.30                   EE   170   119    J B KELLY                 48037

            PRIM   8     T T   04.30                   EE   170   121    H R ENSEY                 25740

            PRIM   9      W  S 10.30                   EE   170   122    C F MERZ                  61930

            PRIM  10      W  S 11.30                   EE   170   120    C F MERZ                  61930

        SUMMARY.  CLOCK HOURS   ROOM HRS   STAFF HRS   STUDENT HRS  SECTIONS  STUDENTS  AVG. CL. SIZE
                     20.0         20.0       20.0        2402.0        10       1201         120

            LAB    1    M      08.30                   AR   106    77    T S BAKES                  3632

            LAB    2    M      10.30                   AR   106    75    E R BULL                  11779

            LAB    3    M      03.30                   AR   106    73    T M REAGAN                74638

            LAB    4     T     08.30                   AR   106    76    D E COURTANEY             18488
```

COURSE DESCRIPTION	TYPE CLASS	SECTION NUMBER	TIME	DAY, HOUR, AND (WEEKS)	BLDG	ROOM	CLASS SIZE	INSTRUCTER-NAME	NUMBER
AFT 110	LAB	5	T	12.30	AR	106	76	T W BAILEY	3339
	LAB	6	T	01.30	AR	106	75	J R SLAGLE	83882
	LAB	7	T	03.30	AR	106	73	S P ROWTON	77946
	LAB	8	W	10.30	AR	106	75	C E DOBBS	23047
	LAB	9	T	08.30	AR	106	74	D E COURTANEY	18482
	LAB	10	T	12.30	AR	106	75	T W BAILEY	3339
	LAB	11	T	01.30	AR	106	75	J R SLAGLE	83882
	LAB	12	T	03.30	AR	106	76	S P ROWTON	77946
	LAB	13	F	08.30	AR	106	75	T S BAKES	3632
	LAB	14	F	10.30	AR	106	74	E R BULL	11779
	LAB	15	F	03.30	AR	106	76	T M REAGAN	74638
	LAB	16	S	10.30	AR	106	76	C E DOBBS	23047

SUMMARY.	CLOCK HOURS	ROOM HRS	STAFF HRS	STUDENT HRS	SECTIONS	STUDENTS	AVG. CL. SIZE
	16.0	16.0	16.0	1201.0	16	1201	75

AFT 230 BASIC AF TRAINING CREDIT 2. CLASS 2

	PRIM	1	M F	09.30	EE	170	53	T S BAKES	3632
	PRIM	2	M F	10.30	EE	170	57	T S BAKES	3632
	PRIM	3	M F	11.30	EE	170	56	T S BAKES	3632
	PRIM	4	M F	02.30	EE	170	57	T S BAKES	3632
	PRIM	5	M F	03.30	EE	170	58	T W BAILEY	3339
	PRIM	6	M F	04.30	EE	170	55	T W BAILEY	3339
	PRIM	7	T T	07.30	EE	170	55	J R SLAGLE	83882
	PRIM	8	T T	08.30	EE	170	57	J R SLAGLE	83882
	PRIM	9	T T	09.30	EE	170	55	J R SLAGLE	83882

FIRST SEMESTER 1963-64
CLASS ORGANIZATION SUMMARY REPORT

	STUDENT HOURS			ENRL IN.	STAFF HOURS			ROOM HOURS			STU-HRS/STAFF-HRS		
	NCN-LAB	LAB	TOTAL	OTHER	NON-LAB	LAB	TOTAL	NON-LAB	LAB	TOTAL	N-LAB	LAB	TOTAL
AFT													
LOWER	4076.0	2038.0	6114.0		50.0	32.0	82.0	50.0	32.0	82.0	81	63	74
UPPER	740.0	185.0	925.0		36.0	32.0	68.0	36.0	32.0	68.0	20	5	13
DUAL													
GRAD													
OTHER													
TOTAL	4816.0	2223.0	7039.0		86.0	64.0	150.0	86.0	64.0	150.0	56	34	46

COMPUTER AUDITS OF CLASS ORGANIZATION INFORMATION

I. The Class Organization Information (Form G) is first audited for completeness and consistency. These checks include testing:

(A) the type-of-instruction code to see if the numbers punched correspond to an element in the set of possible values.

(B) the day-of-the-week code in a similar manner.

(C) the hour-of-the-day code to see if it has the proper format.

(D) the night-class code to see if it is either blank or 'P'.

(E) non-average hour courses for the existence of a building and room.

(F) the student enrollment for a positive zero value.

(G) for the omission of the instructor's name or number.

(H) testing the number of weeks code for a positive non zero number.

II. Next the Form G is tested against both the course enrollment report and University catalog. These include tests to determine:

(A) if the course is listed in the catalog.

(B) if the course is listed in the course enrollment report.

(C) if the course is described as the same type (non-lab, lab, research, individual, work shop etc.) as it is in the catalog.

(D) if the course is taught the same number of hours that the catalog prescribes.

(E) if different parts of the course(lab, non-lab) have consistent enrollments.

III. Next the Form G is tested against the Space Inventory. These include tests to determine:

(A) if the building and room reported on the Form G can be found in the space inventory.

(B) if two classes are meeting in the same room at the same time.

(C) if the class size exceeds the number of stations in the room.

(D) if the room has zero stations.

(E) a listing of classrooms not used.

IV. Proposed audits include tests to determine:

(A) if the instructor listed on the Form G exists on the University Payroll.

(B) if the instructor listed on the Form G is getting paid from the teaching department.

(C) if an instructor is listed on the Form G as teaching in two places at the same time.

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   1ST 63-64 FEBRUARY 17,1964               ROOM UTILIZATION REPORT                              PAGE 164

   BLDG ROOM           TYPE ROOM            DEPARTMENT           AREA                ROOM SIZE
   FWA7  026           CLASSROOM            GEN ACAD             01050 SQUARE FEET        24  STUDENT STATIONS
AFT          10361CV  6
               COURSE       SECTION  TYPE INST  SCHEDULED MEETING TIME                        CLASS SIZE
              AFT  350        1        PRIM     M   F  07.30,08.30                                23
              AFT  350        2        PRIM     M   F  11.30,12.30                                16
              AFT  350        3        PRIM     M   F  01.30,02.30                                22
              AFT  350        4        PRIM      T T   09.30,10.30                                24
              AFT  350        5        PRIM      T T   03.30,04.30                                24
              AFT  470        1        PRIM     M   F  09.30,10.30                                17
              AFT  470        2        PRIM     M   F  03.30,04.30                                20
              AFT  470        3        PRIM      T T   07.30,08.30                                18
              AFT  470        4        PRIM      T T   01.30,02.30                                21

   ROOM USAGE    STUDENTS STUDENT HRS  PERCENTAGE STATION USE   AREA/STATION  ROOM HOURS  SQ FT/STUDENT HRS
                   185        740      86 WHEN IN USE 56 TOTAL   43.7        65 PCT 36.0      1.4
```

```
      BLDG ROOM        TYPE ROOM          DEPARTMENT      AREA                      ROOM SIZE
      EE    170        CLASSROOM          GEN ACAD         01830 SQUARE FEET     167  STUDENT STATIONS
AFT        10361FVA 6
                 COURSE       SECTION  TYPE INST  SCHEDULED MEETING TIME                  CLASS SIZE
                AFT  110        1        PRIM      M   F  07.30                               120
                AFT  110        2        PRIM      M   F  08.30                               122
                AFT  110        3        PRIM      M   F  12.30                               119
                AFT  110        4        PRIM      M   F  01.30                               120
                AFT  110        5        PRIM       T T   10.30                               120
                AFT  110        6        PRIM       T T   11.30                               118
                AFT  110        7        PRIM       T T   03.30                               119
                AFT  110        8        PRIM       T T   04.30                               121
                AFT  110        9        PRIM        W   S 10.30                              122
                AFT  110       10        PRIM        W   S 11.30                              120
                AFT  230        1        PRIM      M   F  09.30                                53
                AFT  230        2        PRIM      M   F  10.30                                57
                AFT  230        3        PRIM      M   F  11.30                                56
                AFT  230        4        PRIM      M   F  02.30                                57
                AFT  230        5        PRIM      M   F  03.30                                58
                AFT  230        6        PRIM      M   F  04.30                                55
                AFT  230        7        PRIM       T T   07.30                                55
                AFT  230        8        PRIM       T T   08.30                                57
                AFT  230        9        PRIM       T T   09.30                                55
                AFT  230       10        PRIM       T T   12.30                                55
                AFT  230       11        PRIM       T T   01.30                                56
                AFT  230       12        PRIM       T T   02.30                                55
                AFT  230       13        PRIM        W   S 07.30                               57
                AFT  230       14        PRIM        W   S 08.30                               55
                AFT  230       15        PRIM        W   S 09.30                               56

    ROOM USAGE   STUDENTS STUDENT HRS  PERCENTAGE STATION USE   AREA/STATION  ROOM HOURS  SQ FT/STUDENT HRS
                   2038       4076     49 WHEN IN USE 44 TOTAL    10.9        91 PCT 50.0       .4
```

AFT NUMBER OF CLASS SESSIONS BY SIZE PER WEEK IN CLASSROOMS

ROOM CAPACITY	0 TO 9	10 TO 19	20 TO 29	30 TO 39	40 TO 49	50 TO 59	60 TO 69	70 TO 79	80 TO 99	100 TO 119	120 TO 139	140 TO 159	160 TO 179	180 TO 199	200 UP	
0- 9	*	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
10- 19	*	*	.	.	.	.	.	.	.	.	.	.	.	.	.	
20- 29	.	12*	24*	.	.	.	.	.	.	.	.	.	.	.	.	36
30- 39	.	.	*	*	.	.	.	.	.	.	.	.	.	.	.	
40- 49	.	.	.	*	*	.	.	.	.	.	.	.	.	.	.	
50- 59	.	.	.	.	*	*	.	.	.	.	.	.	.	.	.	
60- 69	.	.	.	.	.	*	*	.	.	.	.	.	.	.	.	
70- 79	.	.	.	.	.	.	*	*	.	.	.	.	.	.	.	
80- 99	.	.	.	.	.	.	.	*	*	.	.	.	.	.	.	
100-119	.	.	.	.	.	.	.	.	*	*	.	.	.	.	.	
120-139	.	.	.	.	.	.	.	.	.	*	*	.	.	.	.	
140-159	.	.	.	.	.	.	.	.	.	.	*	*	.	.	.	
160-179	.	.	.	.	.	30.	.	.	.	6.	14.	*	*	.	.	50
180-199	.	.	.	.	.	.	.	.	.	.	.	.	*	*	.	
200- UP	.	.	.	.	.	.	.	.	.	.	.	.	.	*	*	
TOTAL	.	12.	24.	.	.	30.	.	.	.	6.	14.	.	.	.	*	86

AFT

NUMBER OF CLASS SESSIONS BY SIZE PER WEEK IN OTHER AREAS

ROOM CAPACITY	0 TO 9	10 TO 19	20 TO 29	30 TO 39	40 TO 49	50 TO 59	60 TO 69	70 TO 79	80 TO 99	100 TO 119	120 TO 139	140 TO 159	160 TO 179	180 TO 199	200 UP	
0- 9	*	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
10- 19	*	*	.	.	.	.	.	.	.	.	.	.	.	.	.	
20- 29	.	*	*	.	.	.	.	.	.	.	.	.	.	.	.	
30- 39	.	.	*	*	.	.	.	.	.	.	.	.	.	.	.	
40- 49	.	.	.	*	*	.	.	.	.	.	.	.	.	.	.	
50- 59	.	.	.	.	*	*	.	.	.	.	.	.	.	.	.	
60- 69	.	.	.	.	.	*	*	.	.	.	.	.	.	.	.	
70- 79	.	.	.	.	.	.	*	*	.	.	.	.	.	.	.	
80- 99	.	.	.	.	.	.	.	*	*	.	.	.	.	.	.	
100-119	.	.	.	.	.	.	.	.	*	*	.	.	.	.	.	
120-139	.	.	.	.	.	.	.	.	.	*	*	.	.	.	.	
140-159	.	.	.	.	.	.	.	.	.	.	*	*	.	.	.	
160-179	.	.	.	.	.	.	.	.	.	.	.	*	*	.	.	
180-199	.	.	.	.	.	.	.	.	.	.	.	.	*	*	.	
200- UP	32.	.	.	.	1.	15.	.	16.	.	.	.	.	.	*	*	64
TOTAL	32.	.	.	.	1.	15.	.	16.	.	.	.	.	.	.	*	64

UNIV

NUMBER OF CLASS SESSIONS BY SIZE PER WEEK IN CLASSROOMS

ROOM CAPACITY	0 TO 9	10 TO 19	20 TO 29	30 TO 39	40 TO 49	50 TO 59	60 TO 69	70 TO 79	80 TO 99	100 TO 119	120 TO 139	140 TO 159	160 TO 179	180 TO 199	200 UP	
0- 9																
10- 19	22*	22*														44
20- 29	56.	251*	576*	17.												900
30- 39	70.	300.	1027*	257*	2.											1656
40- 49	174.	545.	664.	326*	72*											1781
50- 59	88.	163.	336.	274.	257*	74*	3.									1195
60- 69	32.	159.	193.	99.	85.	45*	14*									627
70- 79	16.	24.	43.	20.	36.	32.	9*	2*								182
80- 99	11.	30.	42.	42.	52.	45.	32.	50*	8*							312
100-119		2.	11.	30.	59.	22.	4.	2.	6*							136
120-139	2.	16.	1.	10.	4.	4.	3.	3.	3.							46
140-159			3.	6.		4.	5.	5.	20.	3.	3*	1*				50
160-179	1.	2.	3.	2.	2.	33.	2.	2.	17.	16.	23.	3*				106
180-199				1.		4.	2.			4.		1.		2*		14
200- UP	3.	6.	9.		1.	4.	8.	5.	11.	13.	16.	14.	22.	40*	71*	223
TOTAL	475.	1520.	2908.	1084.	570.	267.	82.	69.	65.	36.	42.	19.	22.	42.	71*	7272

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1ST 62-63 NOVEMBER 11, 1963                 CLASS HOUR DISTRIBUTION                        PAGE    7

SUBJECT FIELD IS AFT                          NON-LABORATORY HOURS

                             MONDAY    TUESDAY   WEDNESDAY THURSDAY  FRIDAY    SATURDAY  HOURLY TOTAL
                    7.30        2         2         1         2         2         1         10
                    8.30        2         2         1         2         2         1         10
                    9.30        2         2         1         2         2         1         10
                   10.30        2         2         1         2         2         1         10
                   11.30        2         1         1         1         2         1          8

                AM TOTAL       10         9         5         9        10         5         48
                   12.30        2         1                   1         2                    6
                    1.30        2         2                   2         2                    8
                    2.30        2         2                   2         2                    8
                    3.30        2         2                   2         2                    8
                    4.30        2         2                   2         2                    8

                PM TOTAL       10         9                   9        10                   38

             DAILY TOTAL       20        18         5        18        20         5         86

                                              LABORATORY HOURS

                             MONDAY    TUESDAY   WEDNESDAY THURSDAY  FRIDAY    SATURDAY  HOURLY TOTAL
                    7.30
                    8.30        4         4                   4         4                   16
                    9.30
                   10.30        4                   4                   4         4         16
                   11.30

                AM TOTAL        8         4         4         4         8         4         32
                   12.30                  4                   4                              8
                    1.30                  4                   4                              8
                    2.30
                    3.30        4         4                   4         4                   16
                    4.30

                PM TOTAL        4        12                  12         4                   32

             DAILY TOTAL       12        16         4        16        12         4         64

              CLASS       ROOM        STAFF       STUDENT                              STUDENTS PER   CONTACT HRS
              HOURS       HOURS       HOURS     CONTACT HRS   SECTIONS    STUDENTS      SECTION     PER CLASS HRS
    LOWER      82.0        82.0        82.0       6114.0         57         4076           71            75
    UPPER      68.0        68.0        68.0        925.0         41          370            9            14
     DUAL        .0          .0          .0           .0          0            0            0             0
 GRADUATE        .0          .0          .0           .0          0            0            0             0
  NON-LAB      86.0        86.0        86.0       4816.0         34         2223           65            56
      LAB      64.0        64.0        64.0       2223.0         64         2223           35            35
   *OTHER        .0          .0          .0           .0          0            0            0             0
    TOTAL     150.0       150.0       150.0       7039.0         98         4446           45            47

          THIS SUBJECT FIELD HAS  36 HOURS OF EVENING CLASSES AND REQUIRES   0 HOUR(S) TO BE ARRANGED.

          *OTHER INCLUDES RESEARCH, WORKSHOP AND INDIVIDUAL.
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                                                   PURDUE UNIVERSITY                                                            PAGE      7    AFT
COURSE PROJECTION....BASE SEMESTER-1ST 63-64....PROJECTED SEMESTER-1ST 72-73
 DATE RUN  ...MAY 28, 1964

AFT ..................COURSE DESCRIPTION.......................***************************COURSE TOTALS*****************************************
                                                              **         *             *              *            *      *
CRS                                CREDIT     NON-LAB LAB  RES   IND**STUDENTS *CREDIT HOURS *NON-LAB HOURS*   LAB HOUR   *RES ENR*IND ENR
 NO.          TITLE                 HOURS      HOURS  HRS  HRS   HRS**ACT. EST.*ACTUAL   EST.*ACTUAL   EST.*ACTUAL   EST.*ACT EST*ACT EST

110  BASIC AIR FORCE TRAIN   2.        .     2.0   1.0             **1201 2052 2402.0 4104.0 2402.0 4104.0 1201.0 2052.0
230  BASIC AF TRAINING       2.        .     2.0   1.0             ** 837 1314 1674.0 2628.0 1674.0 2628.0  837.0 1314.0
350  ADV AIR FCRCE TRAIN     3.7       .     4.0   1.0             ** 109  162  403.3  599.4  436.0  648.0  109.0  162.0
470  ADV AIR FORCE TRAINING  3.7       .     4.0   1.0             **  76  104  281.2  384.8  304.0  416.0   76.0  104.0
..............................................................*******************************************************************************

                                             STUDENTS  COURSES    CREDIT HRS  NON LAB HRS     LAB HRS  RES ENRL  IND ENRL

    ACTUAL TOTALS FOR 1ST SEMESTER 63-64...    2223.0        4        4760.5       4816.0      2223.0

 ESTIMATED TOTALS FOR 1ST SEMESTER 72-73...    3632.0        4        7716.2       7796.0      3632.0

                        PERCENTAGE CHANGE...     63.4                   62.1         61.9        63.4
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PURDUE UNIVERSITY
CLASSROOM REQUIREMENTS
1960 – 1968